

THE CRISIS IN PSYCHOLOGY

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TO MY FRIENDS
IN THE FAR EAST
IN PARTICULAR
DR. CARSON CHANG
AND
MR. CH'Ü SHI YING, M. A.

But the character of this new book is very different from my former publications. For this book, grown out of university lectures, is addressed to an interested general public and deals with its subject in such a way that any person with a general education may follow it. As psychology, in my opinion, is the most important and the most promising of all sciences at the present time, I hope that the number of those who are inclined to follow me may not be small.

It may interest the reader to know that Bertrand Russell's *Analysis of Mind* is also the crystallization of his Peking lectures. I have not referred to his fine work in the text, as I have tried to avoid polemics as far as possible. The reader may compare and may judge himself.

Leipsic, May 20, 1924

HANS DRIESCH

INTRODUCTION

NO other science today is so “problematic” as psychology. There is, in fact, almost no question in psychology which is settled in the way that many questions in mechanics or in biology, for instance, are settled. But among all the unsettled questions in psychology there are some problems of the very first order, so to speak, and it is with problems of this kind that this book will deal. These problems have in our day reached a *critical* point, i.e., a point of turning from one aspect to another, and we may hope that under the new aspect they may lose a good deal of their problematic nature. While studying, therefore, the actual *crisis* in psychology, we intend at the same time to lay the foundation-stone of a psychology which will not be forced to pass through a *critical* state again, at least in the near future.

The reason why all psychology is of a problematic character is obvious: The subject-matter of psychology, though the closest, the most immediate to us, is not something that exists in

space. And the constitution of our mind, unfortunately, is such that an analysis which may proceed to the very last details is possible for us only if the details of a spatial manifoldness are in question. Language, too, has been created with regard to that which is in space, and thus it comes about that with regard to all explanations in the realm of psychology language is rather more of a handicap than a help.

What, then, are the problems "of the very first order" in modern psychology that have reached a critical point nowadays, and that are to be discussed in this volume? There are four such problems, as far as I see: The *mind-body* problem, the problem of the *unconscious*, the problem connected with *psychical research*, and strange to say, perhaps, the problem of the fundamental materials and laws of *normal psychology* pure and simple.

As to the *mind-body* problem, it is well known that the hypothesis of so-called psychophysical parallelism, which seemed to be so well established at the end of the last century, has been attacked and refuted from many different quarters during the last seventy-five years. The

problem of the *unconscious* (and subconscious) has become almost "popular" nowadays, and so has also, to a still greater extent, *psychical research* or "parapsychology." So far, then, there is no question about the problematic and critical character of the subjects chosen for our further discussion.

But what about *normal psychology* pure and simple? Is not this an "official" science of a most elaborate character; has it not been the subject of text-books and manuals for many years? Certainly; and yet we venture to say that "official" normal psychology has become one of the most problematic scientific subjects during recent decades, and that there has hardly been a scientific revolution in our time comparable to that in normal psychology.

We shall now begin at once to go *in medias res*, and have still to say only a few words here about our general arrangement of the various subjects chosen for discussion. I shall arrange all these subjects as if I were writing a complete text-book of psychology. In this way I shall have the opportunity of briefly mentioning and enumerating *all* problems of that thoroughly

problematic science. But most of these problems will be merely mentioned and no more; only the four groups of problems which we have asserted to be "of the very first order" will be discussed more or less fully, and among them normal psychology, pure and simple, will occupy first place and will receive the most elaborate analysis. The advantage gained by this method, it seems to me, is the following: In this way, and in this way alone, will every problem occupy *its proper place in a well-ordered whole*. This is very important, as all "science" is, to be sure, nothing more than *logic*, in the widest sense of the word, or *theory of order*.¹ We shall, then, discuss the *forms of order* of psychical life with special reference to its most important problems.

¹ In my *Ordnungslehre* (2nd edit, 1923) all psychological problems are discussed as parts of my system of logic; cf. chap. D, pp. 315-419.

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I. NORMAL PSYCHOLOGY

1. THE SUBJECT OF PSYCHOLOGY

POPULARLY speaking, psychology is the theory of the “coming and going” of the contents of my consciousness. But this popular definition is very objectionable; for neither is “consciousness” a well defined thing or object, nor is it something like a pot, “in” which there might be something like a “content.”

In order to define psychology accurately, we must start with a certain most fundamental statement upon which all philosophy (and science) rests, namely, the irreducible and inexplicable primordial fact: *I have something consciously*, or, in brief: I “know” something, knowing at the same time *that* I know,—*scio me scire*.¹

The full discussion of this primordial fact belongs to a system of philosophy. What interests us here, with respect to our purpose of defining psychology in an adequate way, is the undeniable fact that many of the *somethings* which I *consciously have* are marked by signs or

¹ Augustine.

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accents (or however you may choose to describe what is indescribable) which mean or signify that they *have already been had before*. In this sense we used to speak, in popular phraseology, of remembrances or of memory-contents. All these *somethings* with the accent of "having already been had" or, in short, with the accent "*before*," or, rather, the accents themselves, now form a long series according to the specificity of the "before": for one "before" is *earlier* than another "before." The totality of this series, when taken as continuous, is called *time*.

Psychology, then, is the theory of the variety of all the *somethings* which I may *consciously have*, and of the laws² which govern the sequence of these various *somethings* in time.

We see at first glance that two different problems are involved in this definition of psychology: the *somethings* themselves, and the sequence of the *somethings*. It is just as it is in chemistry, for instance, where you must first know the variety of the chemical substances, and may then study the laws controlling their change.

² The word "law" is taken here in a very wide sense and may be replaced by the term "form of order."

We might speak of a psychological statics and a psychological dynamics as the two main parts of normal psychology. But we prefer to call the first part the *theory of the materials*. *What* is it that I consciously have or “possess”? This must, of course, be the first question. Even here, at the very beginning, the revolution inaugurated by modern psychology will confront us.

A brief historical review will serve to explain what I mean:

Until about 1900 there were, strange to say, two different kinds of psychology; the one “scientific” and of so-called “universal validity,” the other made for the private use of each single philosopher, so to speak, at home.

Official and scientific psychology was composed of psychophysics and the theory of association, as established by the classical British authors. This psychology formed almost the whole content of the psychological text-books. The additional part of these text-books which dealt with the so-called “higher functions of the mind” not only was so poor that almost nobody cared to read it, but also was often in direct con-

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tradition with what had been established in the main chapters.

The philosophers now felt most clearly, firstly, that the principle of association, though not wrong, certainly did not cover the whole field of psychical phenomena, and, secondly, that the "higher functions" had been discussed in quite an impossible way. It was for this reason that they made their "home"-psychology for private use. So it was with Leibniz, Wolff, Kant, Hegel, Schopenhauer and many others. Of course, this state of things was not very satisfactory, though it lasted a long time before it broke down.

Three men share the honor of having first seen the impossibility of the psychology of their time: E. von Hartmann, Wm. James and H. Bergson. Modern normal psychology starts with them. But these writers were critics rather than builders; they saw the *impossible*, but did not yet clearly see the *possible et necessarium*. It was in the beginning of the present century that modern normal psychology was really created as a *complete* science of universal validity and not merely as a scientific fragment like association psychology. By different roads the same end has

been reached: Kölpe, Marbe and their followers began the analysis of so-called thinking and willing in an exact way, with the result that it was found, firstly, that the variety of the immediate conscious possessions was far greater than had been recognized before, and, secondly, that there exist directing causal agents or factors in psychical life just as in material life, as set forth in the study of biology. Besides this modern psychology of thinking and willing, there came into view several new systems and conceptions of logic, established along different lines by Husserl, Rehmke and myself, which also made it quite evident that the variety within the *something which I consciously have* is very great.

The most important and, I may say, astonishing failure of the older and "classic" normal psychology had been the fact that it did not account for the *meanings*, the *significances*, in our psychical life, i.e., that which renders psychical life "psychical" or "spiritual" in the deeper sense. This was the reason for the strange fact we have mentioned, that there were two psychologies in the past. In fact, a psychology which does not explain *meaning* and *significance* in the single

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acts of psychical life, and which does not take sufficient account of the enrichment of that life in meaning and significance during its progress in time, is a psychology that leaves unexplained the main points. The older psychology explained neither the one nor the other. For the only conscious contents which it registered were so-called sensations and images, and its only law was the law of association, i.e., a law formed in analogy to mechanics.

In order to explain meaning and significance in its complex forms and in order to account for its increase in time, meaning and significance must already be among the elements of psychical contents; and direction can never be explained unless there be something that directs. Modern normal psychology has accomplished what had been omitted by the older classic psychology. We shall now show along what lines of analysis this was done.

2. THE THEORY OF MATERIALS

We have said already that psychology must begin with a *theory of materials*. That means that we must first find out what those *somethings*

are, which are *consciously had* or possessed. The laws of sequence will then be studied in dynamic psychology afterwards.

The very first glance at the *something* reveals the fact not only that it is almost always, if not, indeed, always, of a complex form, but also that the same kinds of elements occur in the various *somethings* again and again. The first part of a theory of materials will therefore be the theory of psychical elements, the second part the theory of *complexes*. —

How can we discover elements and complexes?

A. *The Method*

The answer to this important question is that we discover psychical elements and complexes exclusively by what is generally called *introspection*. “Introspection” is not a very good word for this purpose, but there is no better one in English. In German I should say that we make such a discovery by *Schauen* or by a *Schau*. That means that we realize most consciously and critically what it is that we consciously possess, and, by doing so, know at the same time in a quite definitive way what the elements, the irreducibilities,

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the indefinables are. For elements cannot be defined. Introspection in this sense, of course, relates only to what *I* consciously possess; it reveals the elemental objects of *my* "having."

This statement implies two others. It implies, firstly, that all psychology is, at least to begin with, *my* psychology, and that only figuratively have I used the word "we," thus to refer to "other Egos"; the concept of the *other Ego* is a very difficult and complicated one that will be discussed later in its proper place. The statement implies, secondly, that we have to deal with *objects* of *my* "having," and not with "states" or "conditions" or "properties" or "faculties" of the Ego.

In this sense our theory of *elements* stands in close relationship with a certain division of logic, namely the theory of order or the theory of objects (*Gegenstandslehre*—Meinong, Husserl). But it differs from logic in so far as the objects which are consciously had or possessed are considered in the introductory part of psychology only in so far as they are consciously possessed by the *I*, and not, as in logic, as objects in their

mere objectivity, nor as objects "as such." There will be found, for instance, elemental objects such as *green*, the meaning, *relation*; the meaning, *number*. Logic reflects upon these *meanings* as such, in every respect, while the interest of the theory of elements, as an introductory part of psychology, simply consists in stating that so many and such-and-such elements of objects are elements with regard to my *consciously having*.

The school of so-called *behaviorism* denies introspection. Also, many behaviorists even go so far as to maintain that "sensations" are the only objects of my consciously "having." They do not see how great is the variety of objects that we shall describe later on. While this book will avoid all polemics as far as possible, a few words with regard to behaviorism may, nevertheless, be allowed. We omit to consider here the second of the positions above mentioned, because by our own theory of elements this position will be denied implicitly. Let me, then, only make the following criticism: Even if the behaviorists were right in saying that the only class of conscious objects are sensations, this very statement would itself be the result of "introspection"! And,

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further, to what class of objects belongs the *truth* of the behavioristic theory itself, that there is nothing but sensations? Is this specific truth itself a sensation? The behaviorists would hardly dare assert that it is, I fancy. So we may say, in short, that the behaviorist *forgets himself* in his psychological theory. Behaviorism is a good method,—nay, the only method—in animal psychology; indeed, in ~~this~~ part of psychology, all knowledge that is really “psychological” can be acquired only indirectly, never directly, for the movements of the body are the only things that are given immediately. But in what we may call the *first*, the original psychology, i.e., *my* psychology, conditions are, fortunately, different. And it for this reason that all other psychologies, the psychology of the *other Ego*, of animals, of instincts, etc., must go back to the first psychology as their very foundation. Not to use introspection in “my” psychology would be to proceed as if I always made use of a mirror in order to see what I might see directly—or even worse!

But what about the *experiment*, in modern

psychology, of *thinking and willing*, as applied in the school of Kulpe? Does it not show that another method besides introspection is possible, and therefore preferable? By no means. For the so-called experiment is no proper "experiment" in this case. The experiment consists here only in a directing of the introspection of the "*Versuchperson*," and is nothing else, the concept of the *other Ego* being admitted as a legitimate concept in a provisional way. One instance will suffice: I read to the *Versuchperson* an aphorism of Nietzsche and suggest that he reflect upon what he *consciously has*, firstly, while he understands its meaning, secondly, while he judges about this meaning, whether it be true or not, thirdly, while he compares it with a similar dictum of Goethe. The *Versuchperson* then writes down an account of his "having," and a number of the minutes thus written are material to be analysed by the psychologists. But who is the proper investigator in this case? No doubt, in the *first* place, the *Versuchperson* himself!

We are now well prepared to enter the halls of a proper and complete theory of elements.

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B. *The Theory of Elements*

i. *The pure qualities or suchnesses.*

Here I am only able to say: I *have consciously* such, and such, and such an element: *Green, cold, red, hard*, the musical term "*do*," *white, sweet*, etc. We must not think of physics in this primordial part of psychology: *white* and *black* are as elemental as *red* and *green*. We must also not think of sense organs; psychology does not know anything about "sense organs" in the beginning; it quite simply studies the elements which compose the *somethings* which I immediately or *consciously have* or possess. We therefore avoid calling our pure *suchnesses* or qualities "sensations."

But we may say a few words about certain peculiarities connected with various pure *suchnesses*. In the first place they form groups among themselves: the colors, the tones, the smells, etc. Then, there is a good deal to say about the relations which exist among the members of each group: so-called color-geometry and the theory of musical harmony belong here; but this belongs more to logic, in the larger sense, than to the theory of materials as a part of psychology, though it

is customary to deal with the subject in psychological text-books.

More important for special psychological purposes is the fact that each group of *suchnesses* bears in itself some very strange characteristics, among which we shall mention the most important ones: Colors are "outside," are "in space." This is quite elemental. Colors, for this very reason, provide most of the material out of which the concept of an *object of nature* is formed in logic.

We omit the peculiarities of tones, smells, tastes, etc., and say only a few words about the specific characteristics of those qualities which are generally known under the names of "body-sensations" and which, physiologically, used to be referred to the skin, the joints, the muscles, etc. We, of course, take them simply as specific elemental *suchnesses*. But then we find that they are all related to a very strange complex totality; that they occupy a specific place in this totality; that they bear on themselves a specific *local-accent* ("Lokal-Zeichen"—Lotze) with respect to it. The "totality" we mean is the one on the

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foundation of which the important concept of *my body* will be erected later on.

ii. *Data with regard to space and time*

The quasi-quality *spatial* and the accent of *before* are here in question. The two members of this group are united only as a matter of convenience.

What "spatial" or "near³ to" means is elemental, because it is indefinable. Spatiality is quite immediately possessed, together with its continuity and its three dimensions (the dimension of depth probably being experienced in the kinesthetic way exclusively and not by sight).

But a corresponding continuous something, "time," is not immediately given. The conception of time as a quasi-line is very misleading, as Bergson was the first to see. To put it in my own terms, as has already been done before:⁴ What is immediately present in many *somethings* is an accent of *before* (or after), always specific, one

³ In the general meaning of the word of course, corresponding to the German "*neben*"; not as the opposite to "far from."

⁴ See p. 2.

"before" being *earlier* than another. On the foundation of the totality of the *before*-accents, the concept of continuous time is then formed as a theoretical concept. But this belongs to logic, and we, as psychologists, have nothing to do but to register *near to* and *before* as elemental materials put together in one group for practical reasons only.

iii. *Pleasure and discomfort*

Pleasure and *discomfort* enter as elements into all those complex psychical contents which are generally called feelings. They are like + and —, though not in the sense of mere quantities, but corresponding more to positive and negative electrons. They are not "states of the Ego," as one often finds it asserted, but are objects *to* the Ego, just like *green*, etc. The reason for this wrong opinion seems to be the fact that logic never relates feelings to objects of nature, and that feelings are not among the immediate materials of which the concept of a natural object is formed. Feelings, popularly stated, are "subjective." But, even then, they are *somethings*,

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consciously possessed by the Ego. Pain, by the way, is not a feeling, but a pure quality with a strong accent of discomfort.

iv. *The accents of order*

We now come to the first topic of modern psychology which may fittingly be called revolutionary. We have said that psychical life is full of *meaning*, of *significance*,⁵ of *sense*, and that this very feature has been overlooked by the classic psychology, or, at least, has not been appropriately treated by it. Meaning, we have said, must already be among the psychical elements, in order that the actual complex meanings which we consciously have may be understood and explained. Here, then, we meet the first group of elemental meanings:

It is the irreducible and indefinable *logical concepts* that here stand in question,—significances like *this*, *such*, *not*, *related*, *so many*, *because*, *whole and part*, *order*. I have all these meanings *as objects*, just as I have *green*, *sweet*, *pleasure*, *before*. Of course, these significances

⁵ In German, "*Bedeutung*" or "*Sinn*."

are not "sensible," not "*anschaulich*," to use the untranslatable German word, but, nevertheless, they are objects of my "having."

They are objects for me, like all objects; they are not "properties" of the "mind." We do not even know yet what these latter are, either a "property" or a "mind." I merely consciously have something in an order. That is all and remains all. And among the *somethings* that I "have" are those elemental significances which are so-called "abstract" or *unanschaulich* objects. They and they alone are the real primordial "categories." The theory of the categories is therefore, not as Kant believes, an analysis of pure intelligence,⁶ but the most primordial branch of the theory of objects of order. For our psychological purposes, of course, all elemental significances come into account, not insofar as their meaning as such is in question, but only insofar as they are consciously possessed; not the meaning "related" stands in question, but the elemental fact, I have the significance "*related*."

⁶ "*Analyse des reinen Verstandes*."

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v. *The accents of truth*

But there are more "abstract" significances which are consciously possessed, besides the logical elementals. There are also, so to speak, *accents* of meaning. We now study the first group of these, which we propose to call the *accents of the group of truth*.

I say to you: $\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$, or I explain to you the doctrine of Pythagoras. You understand what I have said and say "all right." That means that the two contents just mentioned have the accent of being *in order*, of being *final with regard to order*, of being "true."⁷

If I had said, $\sqrt{a \cdot b} = \sqrt{a} + \sqrt{b}$, this statement would have had the accent of "being not in order," of "being *wrong*."

And the statement "There are manlike beings on the planet Mars" has the accent of *perhaps*, of "maybe."

But there are still other accents similar to those mentioned, and therefore put together with them into the same group.

⁷ In my system of philosophy I reserve the words "true" or "truth" for metaphysical statements, and speak of "correct" or "correctness" (*Berichtigkeit* in German) in the realm of the theory of order.

Think again of the two mathematical instances: $\sqrt{a \cdot b} = \sqrt{a} \cdot \sqrt{b}$ and the doctrine of Pythagoras. To many of us these two statements have not only the *accent of finality*, as we may briefly put it, but possess still another accent, namely, the accent of "being already known," of "being an old story" or, more technically, of being *settled*.⁸

Höfdding was the first to see the point in question, but what he saw under the expression of a "quality of being known," or "*Bekanntheitsqualität*," covers only part of the field. Höfdding did realize that most of the so-called perceptions, at least for adult persons, are not perceptions in the strictest and simplest sense, but recognitions, i.e., perceptions with an accent. But this holds also for very "abstract" contents and by no means for perceptions exclusively.

Of course, as in the whole theory of elemental materials, we have to do here with objects, with *somethings* which I *consciously have*, and this means with "states of the Ego."

The concept of the accent of *being settled* may

⁸ In German I say "*Endgültigverzeichen*" for the accent of finality, "*Erledigungszeichen*" for the accent of being settled.

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be still further subdivided. A content *A* may bear the accent of being settled or known *itself*, or the accents that *something else* which is necessary in order to understand *A* is settled; but we shall not discuss this point in detail here.⁹

The accent *settled* is very important for the old and famous problem of a *classification of the sciences*. Take, for instance, the science of biology. It implies that physics is settled; this in turn implies the being-settled of geometry; this, in its turn, of arithmetic, and arithmetic, in turn, of pure formal logic. Or take as another instance the principle of the parallelogram of forces: here the meaning of "parallelogram" is settled; in it, the meaning of "4"; in four, the meaning of "this is not non-this," etc.

Thus the concept of *being settled* penetrates logic and for this reason also the whole psychological life.

vi. *The accents of existence*

This is the third group of elemental abstract meanings and quite the last group of the elemental materials of psychology. I shall speak of

⁹ *Ordnungslehre*, 2nd edit., p. 53.

accents of existence or, more fully, of the *sphere of existence*.

To show what I mean by this word: Think what the word "cat" signifies, as used in every day life, with respect to the general characteristics of such an animal, i.e., with reference to its mere outlines, but not to its anatomy or physiology. Now the complex object "cat" may have various accents of existence. Thus, if I say, "Look at this cat," this means a cat with the accent of "belonging to empirical reality, to nature." If I say, "I dreamt of a cat last night," there is the accent of belonging to the sphere of dreams. "Remember that cat," the accent of memory images. "Imagine a cat," accent of mere phantasms, etc.

The "Puss in Boots" also has a special accent of existence, and one other than that of another cat in another fairy tale. So, also, "Richard III" has one accent as the King of England studied in history, and another accent as a person in Shakespeare's play.

So much about the elemental materials of which everything is composed which I may possess or have consciously. Our enumeration is

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most probably not complete; there are doubtless more than just six groups of elemental materials. But the number is immaterial and unimportant in view of what this book takes as its aims.

C. *General Remarks on Complexes*

Elements *qua* elements are probably never possessed consciously. It even seems as if every psychological content were made up by at least one element of each of the six groups enumerated.

Think, for instance, of a circular figure of red color; this is, in fact, a very simple content. And yet you experience, firstly, the quality red; secondly, spatiality; thirdly, you enjoy, very slightly perhaps, color and form; fourthly, the figure you see is a *such* and not a *non-such*; fifthly, you *know* it already; and sixthly, it exists only in your *imagination*.

Thus we have everything we want. Some of the accents may be very feeble, but they are found to be present, if only we look closely.

If, then, all complex contents in psychological life are of the same form of complexity at bottom, how can we classify those complexes, as is done

in every text-book of psychology? We classify according to the principle of *a potiori*, i.e., according to the prevailing element. But in the last resort we must never forget that a perception is also a feeling and a thought,—a thought is never quite free of feeling and perceiving, etc.

But there are other much graver difficulties that face us when we approach the theory of complex contents, and it is with these fundamental difficulties that we must deal first of all.

We have said just above that probably every single psychical content will be found to contain at least one element of each of the six fundamental groups, “if only we look closely.” What does this mean? Does it not seem to suggest that the psychical contents have a sort of independent existence besides that of being *consciously had*? And have we not said, on the other hand, that “somethings” *are* only insofar as they are *consciously had* or possessed? But here still another difficulty arises. I always “have” consciously *what* I have. But having a feeling, for instance, is not analysing it; in order to analyse it, I must have, not the feeling, but *my having my feeling*. This can only occur by a new special “act”

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afterwards. How, then, can I know what I *have* had, and what does it mean, when I say that “what I *have had*” is possibly something other than what I thought it to be before? This, in fact, is a paradox and a great difficulty. In any case we are forced to say that it looks *as if* the psychical contents had their proper independent existence; in any case they are implicitly regarded in such a way.

Strictly speaking the situation seems to me to be as follows: I want to analyse, say, a special case of a *hoping*,—for instance, the hope that my child will recover from illness. I have this case of hoping several times, speaking in the popular phraseology, and now I discover more and more details in it, as time advances. To put it correctly, each “hope” was another hope, was another *something* I had, and only in a very complicated hypothetic sense am I entitled to say that there *was* always the same hope, which was *confusément apperçu* at first, to use a phrase of Bergson’s, and clearly conceived in all its details only at the end. But the hypothesis may be admitted for the sake of brevity, though it implies a certain metaphysical statement, if not

even paradox, that I have had a *something* which I did not "have." Perhaps we might better say "that I *might* have already had the first time, had I given my full attention to the analysis."

But now a new difficulty arises, which was first seen by Bergson. I never *can* have the very same content a second or third time, because, by its having been had already, it is made different from what it was the first time! For the second or any subsequent time, that content carries in itself two accents: one of *before* and another of *already known*, which it did not carry when it was possessed first. Thus every content is exclusively what it is and there *cannot* be two quite identical contents.

Our theory of *accents* acquires its greatest importance here. What I consciously possess in the *now* bears an enormous number of accents of two different kinds. Firstly, it embraces, in the form of accents of *being settled*, everything which I have had before with regard to its content; and, secondly, it refers to all accents of the form *before*. Each accent enters into the other.

It seems a paradox, but it is none the less

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true, that in the *now* I always have implicitly my whole former psychical life. There is not a temporal continuity in my "having," as we shall see later on; but there is a continuity or penetration of contents. This is what Bergson calls *durée*, it seems to me.

But does not psychology become absolutely helpless in the face of these astonishing facts? Are its general conditions not far more full of difficulties than those of the sciences of nature? For in spatial nature every single state or event differs from every other only insofar as each occupies its special locality in space and time, while in psychical life every content is only itself with regard to *quality*.

It is true, psychology can only save itself by strenuous methods, if it wants to classify its complex psychical contents. At present it disregards the various accents of *before* and *being settled*; it does not take them into account. Yet only if this is done is the way open for classification; we must, however, remember what we said above, namely, that nothing but a classification *a potiori* is possible.

D. *The Classification of Complexes*

Let us, then, begin to work out a classification of complex psychical *somethings*. We do not intend to go very deeply into details in this chapter, but shall mention only what is either important with respect to later parts of this book, or what serves to reveal to us the very essence of modern normal psychology and its difference from earlier psychological doctrines.

i. *The sensible complexes*

*Sensibility*¹⁰ prevails in the complex contents in question. We used to speak of "sensations" and "perceptions" as well as of "images." The images may belong to the sphere of dreams, of memory, or of phantasy. But the sphere to which they belong is a matter of no importance to the main outlines of the classification, for, as regards this, they are considered only with re-

¹⁰ I cannot find a better English word for the German *Anschaulichkeit*. Of course we must not think of senses or sense organs, which are assumed to be not yet known to us in this part of psychology, where we are doing nothing but analyse what *I consciously have* in its immediateness.

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spect to what they *are* in their very *immediateness*, i.e., in their being consciously possessed. In this respect a perceived horse and a dreamt horse and a remembered horse may be the same horse with regard to "sensibility," only the accents of existence¹¹ being different. We may fall into error occasionally with respect to these accents, —in the moment of waking up, for example, or when suffering from hallucinations. But this problem belongs to the theory of knowledge, and not to psychology.

But there is another difference among complexes in which sensibility prevails that is of greater importance for classification than the question of accents of existence. This is the difference between *shadow-like* and *body-like*¹² sensible contents, a difference which may be most easily understood by saying that the former look like a black-and-white drawing, the latter like a bit of colored sculpture.

Sensible contents with the accent of *belonging to empirical reality* are always body-like; they

¹¹ See page 21. Husserl would speak of "*regionale Kategorien*" in this case.

¹² "*Leibhaftig*" in German.

are called perceptions in the restricted sense of the word.

Contents of a hallucinatory character may be either body-like or shadow-like.

Dream contents are almost always body-like.

Phantasy and memory contents, i.e., "images" in the restricted sense, are generally shadow-like, at least in adults, but usually body-like in artists and, as Tausch has discovered, in young people until about the fifteenth year.

To sum up the most important points: There are two *phenomenological* differences among sensibilities, the one relating to the general sensible habitus, the other to the accent of existence. With regard to sensibility as such, the first of these comes into account only as shadow-like *or* body-like. The second difference has to do with something that is not sensible, but only connected with sensibility. These differences are independent of each other. For the sensible character of a body-like sensibility *as such* does *not* tell us by itself whether we possess a perception, a hallucination, a dream image, or a memory image. The accent must be made out by a rather complicated process belonging to the co-called

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theory of knowledge, namely, by reflecting upon the relations in which the content in question stands to other contents. The accent belongs to one of the group of elemental *meanings* of an "abstract" character. It never fails to exist. Thus we see that the sensible is never without the non-sensible. This proves our statement that all classification of complex-psychical *some-things* is only a classification *a potiori*.

The following table sums it all up :

1. Body-like sensibilities :

- a* with accent *perception*
- b* with accent *dream image*
- c* with accent *hallucination*
- d* with accent *memory image*
- e* with accent *phantasy image*

2. Shadow-like sensibilities :

- a* with accent *hallucination*
- b* with accent *memory image*
- c* with accent *phantasy image*

A certain variety among memory images may be mentioned: memory images may have the

general indefinite accent *before* or the definite accent *at that point of the past*. The phantasy image has no time accent.

ii. *Thoughts*

By the word *thought* we shall denominate those *conscious somethings* the elemental constituents of which are to a great extent or almost exclusively of the type of so-called "abstract" nature, i.e., strictly speaking, meanings or significances.

What I mean when speaking of a dog, a table, or a pen is something that contains already a good many "abstract" elements, for I cannot have a *thing* in the form of a mere sensibility; *thing-ness*, so to speak, is nothing sensible, but a meaning. Thus *things*, as *somethings* which are possessed consciously, stand, as it were, midway between sensibilities and thoughts.

Pure thoughts are generally complexes of relations and meanings of the most various kind. Keep in your mind the complex *something*: "Hume's philosophical system" or, more complex still, "The difference between the systems of Kant and Hume." These are instances of

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thoughts, i.e., of *somethings* which consist almost completely of elements which are not of sensible nature, and are not feelings. They consist exclusively of meanings of order and of various sorts of accents, it seems.

“It seems”—here we come into contact with a problem recognized by Aristotle. Are there thoughts which are *absolutely* free from anything sensible? That is the question much discussed nowadays in the school of Külpe. Of course, different Egos—to use the popular term—may vary in this respect. My personal opinion is that there exists in every case what I might call the sensible *bearer*¹³ of a thought, but that this bearer is not a fixed and definite one for every sort of thought, and that anything sensible may “bear” anything abstract. If, for instance, I am thinking of “Nietzsche’s philosophy” I find that I either have the letter *N* before my optical phantasy, or that my fingers move a little as if they were to write *N*, or that my lips are moving correspondingly, etc. But this is all. Any optical or kinesthetic or acoustical bearer may support a thought. This bearer is, however,

¹³ “*Träger*” in German.

of no importance at all for the main thing in question; only it must not be missing. We may speak of an *all-too-human* restriction in this case and may refer briefly to Bergson's statement that numbers, or, strictly speaking, *so many's*, cannot be possessed consciously without some spatial foundation in the form of points, lines, etc., though the meaning of *so many* has nothing to do with space at all.

iii. *Feelings.*

Let us first remark once more¹⁴ that feelings are not "states" of the Ego, but *somethings* or objects which I consciously have. They may indicate states of the mind or soul; but *mind* and *soul* are terms which we do not yet well know; in any case they do not mean the same as the words *I* or *Ego*.

Feelings are thoughts with a strong and prevailing accent of one of the elements *pleasure* or *discomfort*. They may be classified, but the classification relates to their substantial nucleus exclusively, i.e., to the complex thought-contents to which pleasure or discomfort is attached, the

¹⁴ Cf. p. 8.

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pleasure and discomfort as such being always the same. Feelings have a certain *intensity* which will become important in the theory of *will*. But it is not merely this intensity that comes into account in the sphere of this theory, but something else as well, namely, that which has been called *depth* or *weight* (Krüger), and which in my own terminology would be best styled the accent of *being in order*, or, of *finality*. Whenever there is any sort of competition of different feelings with regard to their determining so-called "will," the intensity of one feeling may act in competition with the finality of the other, say, in a moral respect. The intensity is attached to the accent of elemental pleasure or discomfort, the accent of finality to the substantial nucleus or to one of its parts.

The whole theory of feelings is still, however, in a very unsettled and provisional state. We therefore omit details here and proceed to the analysis of one very important complex *something* which stands in the middle ground between feeling and thought, and which is regarded as a special class of *somethings* by many authors: *will*. The analysis of will is to form the next section

of this chapter. It will imply very many important problems of a general kind and may serve at the same time as a good instance of what a proper *analysis* of a complex *something* ought to be.

E. *The Analysis of Will*

We shall analyse will as a *something* that is consciously had, and not as a "faculty" or property of the "mind," also not as an active "conscious process" starting from the Ego. At least we do not know, at the very start, whether there exists any such thing as a "conscious process." We simply analyse into its elements what I consciously have when I *will*. That is the whole task.

Suppose I *will* to write a letter, say, a very important letter, but one which is not very pleasant but rather disagreeable to write. But it must be written. What do I *have* while I am "willing" to write?

I have consciously, while having the *will* to write:

Firstly: What may be called a *substantial nucleus* of the form, *written letter*. This is a

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thought with a good many sensible elements in it; I may even "see" something like a written letter in my imagination.

Secondly: The nucleus "written letter" carries varied accents. Thus, it exists *now* only in my *imagination*, and this is rather *unpleasant*. But *later* it will be *real*, in the empirical sense, and that will be *pleasant*. Here are six accents altogether or, rather, twice three. The words denoting the accents are printed in italics. We see that the accents are of time, of feeling and of the sphere of existence. The six accents are present at once, penetrating one another in an almost inexpressible way. Sometimes one accent is in the foreground, sometimes another. But all six are always present, to a certain extent at least.

So far we have analysed not will, but *wish*. The analysis given up to this point may, in fact, be called the analysis of wish, if only we notice that in this case an accent of *perhaps* must be added: *perhaps* the wish is to be fulfilled, *perhaps* it is not. We may now continue our analysis of will:

Thirdly: It is *I* who wills. The accent of *I* is strong.

Fourthly: There is some kinesthetic sensation, say, in my hand, as if I were already beginning to write. Such a sensation probably never fails to exist, but is as immaterial to the main point as the *bearer* of a thought, discussed in a former paragraph.

But now we come to the main points, i.e., to those constituents of the complex in question which may properly be said to form the very essence of *will*:

Fifthly: *I will*, and I know *that I can*. Who is the one who *can*? Correctly stated not I, but my body, my hand for example. *It* can and I know that it can.

To put it in strictly technical terms: I know with the accent of *being settled* that my body is able to play an important causal part in the (empirical) realization of the nucleus of my will.

Here we have the point which sharply separates *will* from *wish*: I cannot “will” to fly to Mars, but can only wish it, because I have the final knowledge that my body is *not* able “to plan an important causal part in the realization of the nucleus” in question.

Sixthly: What I will, *ought to* be done. The

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content of my willing has an accent of the class of *being in order*. This accent may be very strong in so-called moral or ethical willing. But we never miss it, though it may often be rather unimportant in any ethical respect. I *approve*, we may also say, the content of my will. The approving may be the result of a conflict, of a competition of feelings; this point belongs to genetic psychology and does not interest us here, where we are only discussing the materials. In any case I *have* the "approving" whenever I will, from whatever source it may come genetically.

So far we have analysed will as the prerequisite of action. This may be called centrifugal will. But there exists *inner* or *centripetal* will also. I may *will* to be attentive, to remember something, to utter a name, to solve a problem. In this case everything is the same as in our analysis of centrifugal will, except that some terms have to be changed. These are combined in the phenomenon of "inner will." There are:

Firstly: The nucleus, i.e., the idea of "my consciously having attention, or the name, or the solution."

Secondly: *Six* accents of time, sphere of exist-

ence and feeling, i.e., the nucleus is at *present* merely *vague* and this is *unpleasant*, but it will be in the *future* a *clear conscious something* and this will be *pleasant*.

Thirdly: It is *I* who wills.

Fourthly: Kinesthetic sensations, perhaps in the skin of the face.

Fifthly: I will and I *can*. Who "can"? Not *I* in the proper sense, but a something yet unknown (afterwards to be called *my mind*). I know that my mind is able to transform the nucleus into the clear conscious state.

Sixthly: The nucleus *ought to* stand consciously before me.

Thus we have finished our analysis of willing. We now know what we have found. But more important, perhaps, is what we have *not* found!

In the analysis of will as well as of thought we did *not* find any element of *conscious activity*, of *doing*, even of *becoming*. We found, so to speak, only static elements in a *something* that was had or possessed, that was "object."

We are, then, not allowed to say: I will and *I do*, but: I will *and it happens* or, if you like it better, I will *and my body* (my mind) acts, or

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moves, or does. With respect to consciousness there is a *gap* between *my* willing and the *doing* of my body or my (unconscious) mind. This was seen by Hume.

What holds good for willing in the restricted sense also holds good for so-called thinking, for "reflecting" about something, etc. Please note well that we have not once made use of the verb to "think," but only the expression "I have a thought."

Willing and thinking as conscious activities do not exist. They occur neither among the elemental nor among the complex materials of conscious life.

Let us add still a few words about what is popularly called thinking or reflecting "over" something (*nachdenken* in German). What do I consciously have in this case, say, if "I reflect" over the solution of a mathematical equation of the second degree?

I *have* a good many things, one after the other, in this case, but "I" do *not* "make" the second out of the first:

At the beginning I have the equation as it stands in the book, implying its meaning. Almost

at the same time I have the general scheme of the solution of such equations:

$$x = -\frac{a}{2} \pm \sqrt{\frac{a^2}{4} - b}.$$

Then comes the scheme of transformation: the equation must be brought into the form:

$$x^2 + ax + b = 0.$$

All this forms the starting point. And then I "do" absolutely nothing, but "it" *does* and puts before me what it has done. And now "it comes to me" ("*es fällt mir ein*," as we say in German) that a certain transformation of the original equation is possible, say by division, which brings it nearer to the standard form. I do nothing again; but "it comes" again, and so on, until finally *a* and *b* have their definite values. The empty schema is no longer a mere schema but the solution.

We shall come back to this problem in detail later on. Let me, then, only say at this point: "Thinking over something" is not a conscious doing, but is a "having" of a sequence of *some-things* in the run of time each of which is *richer in finality* with regard to the task to be solved

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than its antecedent. So it is at least if "all goes well."

F. *Summary*

If we look back upon our theory of psychic materials, we find that it differs fundamentally from almost all earlier psychological systems in two different respects:

Firstly: *Meaning*, which had been overlooked in its objective character in almost all former systems, has got its proper place in the theory of elements: I *have consciously* various forms of meaning or significance just as I *have* "green" or the note "re." For this reason our psychology will not fail to explain the very complex meanings of which our whole conscious life consists.

Secondly: We do *not* speak of a *conscious activity*, which had been regarded as a self-evident fact by earlier psychologists. No such activity exists! Psychical doing, becoming, performing, and, therefore, thinking and willing also, taken as *processes*, do not belong to the *conscious sphere*.

But where, then, do they belong?

The raising of this important problem leads

us to the next section of our book, in which we shall discuss the laws which the temporal sequence of the *somethings* which I *consciously have* really obeys.

3. THE DYNAMICS OF INNER MENTAL LIFE

The problem we have now to discuss is this:

Given a sequence in time of *somethings* consciously possessed by the *I* or *the Ego*,¹⁵ what *forms of order* are to be discovered among these *somethings* with regard to their temporal sequence? In what way can that which happens be understood by analogy to causality in nature, i.e., in such a way that what is or happens now has, as it were, its sufficient reason in what has happened or been before?

Causal conception of the temporal sequence of conscious contents would be a rather easy matter *if* the connection between a content *A* and the next content *B* were itself consciously possessed *as* a causal, a dynamic, connection,

¹⁵ I prefer to say "by the I" because the term, *Ego*, may suggest something like a theory or substance which is not at all in question here. "I" in its strict sense, ought not to be subjected to declination!

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if I were *making B* out of *A*, and if I consciously knew about my doing so. But this, we have seen, is not the case. My consciously having is static, not dynamic. I merely *have consciously*. This, in fact, is all. I do not "do" consciously.

It follows from this that causal connections between the various conscious contents succeeding one another in time are *not immediately* possessed by the Ego, but are only *meant*, as if they existed independently, in just the same way in which forces, affinities, energies in nature are "meant" as quasi-existing, but are not immediately known in the way in which I know about the "materials," elemental or complex, which we have studied in the preceding sections. Causal psychology, in fact, has a great similarity to natural science from the logical point of view, and all the concepts which will play a part on the following pages of this book may be compared with such concepts as potential energy, embryonic potency, electric potential, etc., but *not* with will, feeling, and thought, as heretofore described. This will be clearer as our discussion proceeds.

We now begin our analysis proper. This an-

alysis, at first, will consider only the temporal sequence of such conscious *somethings* as belong to what is generally called *inner* psychical life, namely, to the so-called stream of consciousness, including images, thoughts, feelings, willings, etc. At first we shall *not* have to do with so-called sensations and perceptions, i.e., with what comes to us through the senses, to put it in popular language.

This also is one of the points in which modern psychology differs widely from the older psychology. The older psychology, almost always, was established on the foundation of a naïve realism, i.e., of a primitive and popular metaphysics, which, without any criticism or analysis, regarded "mind," "body," "senses," "sense organs," "other conscious Egos," etc., as *being*, or, as *existing*.

Our psychology does not know, at the beginning, what all these terms mean. It knows *only* that I *have consciously something* and that I have *different somethings* in the sequence of time. For this alone is quite beyond doubt. And it also is beyond doubt that there are a good many sequences of conscious *somethings* which

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do not need any reference to what is popularly called "body," "sense organ," etc. It is the totality of such sequences which we call "human psychical life."

We have made use of the popular expression, a "stream of consciousness." The expression, of course, is not quite correct. For, as our theory of materials has shown us, there is no such *stream*. I *now* have *this* content, and *then that*, and *then that*, etc. But I have nothing *between this* and *that* and *that*; in particular, I "have" no "doing," no "making," between them in a conscious way. A sequence of electric sparks would be a far better analogy to what the sequence of conscious contents really is than the analogy of a "stream."

A. Association

The theory of so-called *association* is the most simple and, at the same time, the oldest of all theories of scientific psychology. This theory is fully explained in every psychological text-book. We therefore may treat it very briefly, explaining it in our own terms:

There is a something, which at first we shall

simply call *X*, in which, though not in the spatial sense of the word "in," *are* all those contents which may consciously be possessed in the future. But these contents are there, of course, not in the conscious state, for only one of all possible contents is conscious at a given moment of time. In what state, then, *are* they in the *X*? The answer is: In an *unconscious* state, and the something we have called *X*, in which the unconscious contents are, is itself unconscious also.

Here, then, we meet for the first time the much disputed term of the *unconscious*. We meet it at the very entrance to association psychology, the most simple form of all theoretical psychology. What does the word "unconscious" mean? It certainly does *not* mean "physical" or "natural"; it means "psychical but not conscious-psychical." *The term is negative in form only.* like the term "immortal," for instance. It means something positive, which, while we do not know it in the peculiarities of its existence, nevertheless we know to be "psychical" in a very general and vague sense. The "unconscious" belongs to that general realm of empirical being which we call the "psychical" realm of empirical existence.

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"Unconscious," and yet not physical, we may also say is a *concept* of theory that is presupposed in order to "explain." But to explain what? The answer is: The sequence of conscious contents as it *immediately* is. Thus we see that the very first step in causal psychology leads us right out of the realm of our immediate "possessions" into the realm of a community of *somethings* all of which are merely *meant as if* they existed, just as in the case in the science of nature.¹⁶

How, then, does it happen that out of the many *unconscious somethings* which are "in" the unconscious *X*, always one, at a given moment, becomes a consciously possessed *something*, and what are the general principles according to which the change from the unconscious state of a certain *something* into the conscious state is due?

Association is the principle, we are told. And by this term is meant the following:

Every content has two kinds of faculties or latent forces, as it were. When in the conscious state, one content may awaken another content

¹⁶ Cf. *Ordnungslehre*, 2nd edit., 1923, pp. 146 ff. and 382 ff.

to consciousness; when in the unconscious state it has the faculty of being awakened. And this awakening occurs according to the association principle: Those *pairs* of contents, say *A* and *B*, which have *often* been consciously had together or immediately after one another, or those pairs, which, though they have been consciously possessed only once, were marked by a strong accent of feeling, stand in "association affinity." That means that when one of these contents stands before the conscious Ego, it most probably will awaken that other content with which it forms a pair.

This, at least, is so-called association by contiguity, i.e., association proper. Text-books also tell us of association by similarity and contrast; but this is a very vague concept, since, in a certain sense at least, every content stands in "similarity" to every other and also in "contrast" to every other. A cat is not only similar to a dog, since both are animals, but also stands in "contrast" to a dog. But a cat is also "similar" to a tiger, also to coffee, as the *words* "cat" and "coffee" both begin with a "c."

Thus the principle of association by similar-

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ity and contrast very evidently lacks univocal-ity. *A*, when conscious, may, according to that principle, arouse into consciousness *B*, but also *C*, or *D*, or *E*, etc.

But is association by contiguity much better? *A* has been together with *B* very often. Well, but it was also "together" with *C* or *D* or *E*. On what, then, does it depend, that at one time *B* is aroused by *A*, at another time *C*, and at a third time *D*, as is practically the case? Univocal determination is lacking also here.

The *law* of association is therefore not a real "law." What, for example, would the principle of Galileo tell us, if it took the form: A body in motion goes either straight on with the same velocity, or with an increasing or decreasing velocity, or it moves in a curve, or it turns round a corner, etc., etc.? But Galileo's principle does not, as a matter of fact, have this "form," which is a form incapable of establishing any principle. Galileo's principle does not speak of a body in motion, but of a body in motion "left to itself," and of this it affirms inertia. But the so-called "principle" of association is, in fact, like the first, or false, formulation of Galileo's law.

And even if the association principle did not lack univocality, it would still not be able to explain what is to be explained. We here reach a point of first importance.

As time proceeds, the so-called inner psychical life becomes richer and richer in contents which have the accent of being final, of being "in order," of being "true," etc. And, besides, there are *new* contents appearing in inner life in the course of time, contents which may be of the form of a phantasy image or of the form of a thought, but which in any case are not mere repetitions of what has been had consciously before.

Both these features constitute the most important characteristics of psychical life, for psychical life is a matter of meaning or significance not only in a static, but also in a dynamic way. That is to say: not only is there meaning among its contents, elemental or complex, but the whole course of that life is directed towards an increase of meaning. It consists, so to speak, in an enrichment by meaning.

The association theory, however, even in its broadest form, including association by similar-

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ity and contrast, is absolutely unable to explain these important features of psychical life. It has nothing to do with enrichment of meaning, because it has nothing to do with meaning at all. It is absolutely incapable of explaining the origin of any new content, be it nothing more than a phantasy image. For the association theory is by its very essence a theory of *copying* and cannot be more.

This, then, is the greatest defect of the association theory. It is not able to explain the chief characteristics of psychical life as they really are. This defect is fatal.

This defect was, of course, seen by a good many psychologists, but for a long time they did not know how to evade it. At first, they tried to introduce the concepts of *constellation* and *preparedness*. Though these concepts are by no means sufficient, they at least mark the first step of theoretical progress. Thus, the unconscious contents in the unconscious *X* were regarded as being in various relations to one another, the totality of these relations being a "constellation," though not in the spatial sense of the word, of course. In connection with their con-

stellation the contents were regarded as being in different ways "prepared" to follow the associative stimulus that went out from a content which happened to be in the conscious state at a given moment of time.

This view, it is true, was a sort of quasi-mechanics of more than the one dimension, which is, so to speak, the character of the classical association theory. But, even then, such a view was by no means all that was required. For a quasi-mechanics of more than one dimension still remains quasi-"mechanics," i.e., a causal theory that begins with singularities, and proceeds from these, in their very singleness, to the totalities to be explained.

But *this* is the main point at issue. *All* sorts of quasi-"mechanics" are to be given up, if psychological life is to be explained as it really is, and it does not much matter whether we work on the analogy of a one-dimensional mechanics or of a many-dimensional one. In either case we have the concept of a system which is the *sum* of its parts, and it is this very concept that cannot explain psychological life as it really is.

There were a few, Höffding, for example, who

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tried to bring the concept of *wholeness* into the old association theory. A law was proclaimed according to which there was an *associative affinity* between "part" and "whole," each part having the faculty of awakening the corresponding whole into conscious existence and vice versa. But in this theory, in the first place, whole and part were regarded as being *fixed* psychical quasi-things, so to speak, waiting merely to be called. And, secondly: Are there not a large number of "wholes" in relation to a given "part," and vice versa? A fox is part of a zoological garden, of a hunting party, of the zoological system, of a museum, even the "Reinicke Fuchs" of a fairy tale. Universal determination is lacking here also.

We must have other *dynamic* factors than merely "associative affinity" or forces. And all additions heretofore made to the classical association theory were only, to put it briefly, of a static kind.

The dynamic factors, then, which are needed for a complete causal theory of psychical life are of two kinds. We must have *limiting* agents and *directing* agents.

B. Limiting and Directing Agents

By "limiting" agents I understand such unconscious causal psychical factors as reduce the number of possible associations, i.e., of all those associative affinities which might possibly be awakened, *if* the pure association theory were true. A certain content *A*, now in the conscious state, may be in affinity with *B*, *C*, *D*, *E* *X*, *Y*, *Z*. The limiting factor now stops, let us say, 15 of these 25 possibilities; then there remains only a choice among 10. Of course, we have not gained a univocal determination so far, but we are at least on the way to it.

A few simple examples will serve to illustrate more clearly what is meant by *limiting* psychical dynamic factors. If we are occupied with, say, an historical problem, almost exclusively contents of an historical nature appear before us. The same is true in everyday life, as is well known.

But, of course, we need more than this. We must find an unconscious dynamic agent that leads the single branches of the so-called "stream" of consciousness—which in fact is not a stream, as we know¹⁷—to their relative

¹⁷ Cf. p. 46.

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ends, i.e., to some definite final contents which are *in order*. For all psychical life is nothing but various chains of contents the final link of which is "order."

Let me illustrate, by a few examples, what is meant by this expression. I shall do this at first in a more or less popular way, and shall bring in a technical formulation later.

We all know what is meant by the words, that somebody has to perform a task, or, that he *stands under a task*, as we prefer to say. Let us, then, discuss what happens in psychical inner life, when we "stand under a task" and have to perform it. People used to say in this connection that we "think" over the task and finally find (or do not find) the solution. This statement, however, cannot be accepted by us, as we now know that I *only consciously have something*, but am not "doing" something consciously. Thinking as a conscious kind of doing, making, even "becoming" does not exist; to think, if we wish to use the word at all, means nothing more than to *have* a thought, and never anything else, at least in the sphere of the conscious.

What, then, must we say instead of saying

that I "think" over the task in order to perform it? We have already briefly mentioned (page 40), what the real "materials" are which are immediately present to the Ego, whenever popular language speaks of "thinking over a task."

There are the consecutive moments of time *A, B, C, N*. At each of these moments a *something* relating to the task is consciously possessed by the Ego that "stands under" it. Each subsequent *something* is richer in order, with regard to the task's performance, and at the end, at the moment *N*, there is full order with regard to the task, *final* order, order with the accent of finality or however we may choose to put it.

This discussion of what consciously happens while "solving" a task, may still be, however, a little too abstract and general. We have not yet mentioned certain peculiarities of great importance.

In what form do I know *that* I am "standing under" a task? How is my "standing under" it consciously possessed?

In order to discuss this important question in an appropriate way, it will be best to study first

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some particular tasks, "under which one may stand."

Let us assume that a schoolboy has to solve a mathematical equation of the second degree. What, then, does the boy *consciously have* at the start? He has a certain visual image, i.e., the written or printed equation, which has a certain relational character. But he also has the general formula of the solution, which consists of two parts or, rather, steps. For, firstly, the equation must be brought into the form:

$$x^2 + ax + b = 0,$$

and, then, secondly, the special values of a and b must take their places in the equation:

$$x = -\frac{a}{2} \pm \sqrt{\left(\frac{a}{2}\right)^2 - b}.$$

Now our schoolboy begins to "think over" the solution. That means, as we know, that *he* does nothing. But a something, which we may again call X , as we called it before when speaking of the association theory, *does* for him; and this in such a way that the next content which he *consciously has*, after the original one, is a cer-

tain transformation of the given equation, say, by a division by a common factor on both sides that renders the equation much easier to investigate. Then another content comes to our schoolboy, and, perhaps, two more such contents, each of them nearer to the *being in order*, i.e., to the solution. And then suddenly the solution is there.

Let us call the general formula of the solution of an equation of the second degree an *anticipated schema*. Then it is the task given to our schoolboy to fill this schema with content on the foundation of the equation presented to him. It is as if there were a tension between the anticipated schema and the original equation. This tension acts in the unconscious X in a definite and *directing* way, after *limiting* factors have already restricted the number of possible associations.

Let us take another instance: A boy wishes to "remember" a name, say of a king of France. He has in the beginning as his *anticipated schema* the totality of the relations of a certain period of European history; most of the schema is filled with content, but there is at a certain

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point a gap, the relations of which are quite fixed on all sides, namely: the *forgotten* name of the king. The boy again "does" nothing, but the unconscious *X* "does," under the influence of the tension between empty schema and schema filled with content, and finally the name is remembered and,—a rather strange thing but nevertheless true,—is recognized at the same time *as* the name in question.

What we have described so far has been studied experimentally on a very broad foundation by the psychologists of the Külpe school. The "task" was given to the "*Versuchperson*" of making out whether two given concepts were subordinated one to the other, or coordinated, and whether they stood in the relation of whole and part or of universal and particular. The "*Versuchperson*" had to decide and write down what he had "consciously possessed" during his so-called "thinking." The record thus written was then subjected to theoretical analysis.

Certain technical terms that play an important rôle in modern psychology of thinking (and willing) may now be explained.

There is, in the first place, the term *determining tendency* (*Determinierende Tendenz*), introduced by Ach. In popular language, this means the final aim of "thinking" and "willing," or, in our own terms, that which is to be *in order*, that which at the end is to be *had consciously* with the accent of being final in a certain definite respect. In our mathematical instance, this is the "equation solved." The idea of it may be *consciously had* occasionally, certainly in the beginning, but it *acts* "in" the unconscious *X* as an *unconscious something*, or, rather, what acts is the "tension" between the task and its solution, this tension also being considered as unconscious. The "determining tendency" acts in two ways: firstly as *limiting*, and secondly as *directing*. That means, first, that it merely eliminates a great number of associative possibilities, and, secondly, that it selects out of the number left by its limiting power such associations as are suitable for the solution. For, certainly, the assumption of only a limiting power does not suffice.

The "determining tendency" is, as we know,

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not always present in its conscious state. It is so present only in the beginning and, later on, perhaps occasionally. But it acts in its unconscious form without interruption. Rather often, indeed, there are tendencies at work which never become conscious during their acting, or perhaps only at the end. These dynamic psychical agents, then, are pure theoretical entities that do not rest on any immediately conscious foundation at all. They have been called *latent directing potencies* (*Latente Einstellung*—Koffka).

These latent directing potencies play a big rôle in daily psychical life. Almost always we are “under” a sort of task or endeavor which we do not consciously know ourselves, but which penetrates the whole conscious life by its directing force.

The determining tendencies in the narrower sense of the term, namely, those directing potencies which, though unconscious as dynamic factors, still have their conscious representation occasionally, are, of course, much more appropriate for analytical and experimental investigation than are those potencies which, as regards

their conscious state, remain latent forever. But psychological theory is entitled to introduce them also by analogy.

C. *On So-called Reproduction*

We now leave the limiting and directing psychological aspects for a while, with the intention of coming back to them from another point of view later on. For it seems necessary, before we proceed, to discuss a certain problem which might very well have been dealt with in an earlier chapter, but which in any case must be discussed now.

Let us begin by introducing a new term: *reproduction*,—well known from psychological text-books.

Reproduction means the process of transformation of a psychical content from the unconscious into the conscious state. Reproduction, then, is in the service of association first of all, and, since association, or at least, associative affinity, is a—not *the*—foundation of all psychical processes, reproduction is fundamental, at least as far as the conscious side of psychical life is concerned.

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What then does reproduction mean? Does not the word suggest that there exist "in" the unconscious *X* a great number of unconscious quasi-things, in the form of fixed and definite somethings, and that these quasi-things have two modi of existence, an unconscious and a conscious one? In this case alone would the word *re*-production be a proper name for the matter in question.

But at once a difficulty appears. For there is the faculty of so-called *phantasy*. The mermaid and the centaur are some of its results, the one a human woman with a fish's tail, the other a horse with a man's head. These came into psychical life one day for the first time. They certainly were not *re*-produced as such. They were not quasi-things, but have been made quasi-things by unconscious agents which are at work in phantastic imagination. But this woman-*and*-fish, horse-*and*-man, as psychical possessions, cannot have been "fixed and definite" quasi-things, but must have been dissolvable things. What, then, are fixed and definite things?

And another difficulty here appears, much more severe and grave than the first one. It has

to do with memory images in their relation to the originals, which first came "through the senses," a phrase we may be allowed to use here in its popular meaning.

The memory images are by no means "fixed and definite" copies of the originals, but differ from them in two respects. Firstly, they almost always are nothing but fragments of the originals, for they always lack certain details that the originals have. Secondly, they are always damaged or corrupted "copies." For example, let me ask you to try to imagine the head of a friend or a mountain range you know very well. Make a sketch of these from your imagination. You will always find, when looking at the real friend or the real mountains again, that your sketch is wrong. What you have drawn is not complete, and, what is more important, not quite correct. The strange thing, however, is that your sketch, though incomplete and incorrect, is yet a whole, and a whole of a highly individualized character. You have imagined your friend in a definite color and situation, say, half from the left, and on a specifically colored background.

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What, then, remains of the quasi-psychical things, fixed and definite, which are said to be *re-produced*, i.e., merely transformed from the unconscious into the conscious state? Almost nothing, it seems to me.

There is no *re-production*; there is *production* out of material which is able to accept any new form or combination of its elements.

And now, to all that we have here discussed, must be added the point mentioned in a previous chapter, that any content that is *re-produced* (as text-books used to say) even the second time, bears on itself the accent of *having been already consciously possessed*, and differs by this very accent from its first conscious existence.

Quasi-things, therefore, in psychical life, if we wish to use this expression at all, may be called the elemental materials we have studied in the beginning, but absolutely nothing else.

What, then, is association on such a foundation? Nothing but a rather rough method of classification of certain comparatively simple production phenomena. There are *no* fixed and definite psychical things with fixed associative affinities. But the acting, psychical, dynamic

principle operates occasionally, in the simplest cases of its so acting, in such a way that it is *as if there were* such things. The use of the word "association" is only a rather loose way of describing what happens. For there are neither fixed things, nor fixed affinities, nor any real *re*-production.

After this fundamental discovery, which, though it might have been explained earlier, here stands in its proper place, it seems to me, we may return to the analysis of the "determining tendency" or the "standing under a task."

What is to follow will lead us to the final concept of normal dynamic causal psychology, as far as inner psychical life is concerned.

D. *The Concept of My Soul*

Tasks to be solved may be of three different forms:

Firstly, you may have an anticipated schema already filled with content with the exception of but one place. This is the case when you try to remember, for example, the name of some particular king.

Secondly, you may have an anticipated schema

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which is quite empty and is to be filled with content on the foundation of a certain given system of relations. This is the case if you try to "solve" a mathematical equation.

The expression, *completing a complex*, (*Komplexerganzung*—Selz) has been used. The unconscious directing tendency acts, with the result of completing a complex which had been partly or almost wholly incomplete. But we are by no means thinking here of a so-called association between whole and part, as discussed above (page 53). For we are no longer picturing, as "fixed and definite" psychical things merely to be *re-produced*, either the complete complex, or the incomplete complex, or the material to be put into the complex, or the system of relations. *Completing a complex* to us is now merely a descriptive term denoting a special way in which psychical dynamic factors very often act.

Thirdly, there are cases in psychical life where anticipated schemata are not only to be filled with content, partly or completely, but *where there are no such schemata*, where, therefore, the schemata themselves have to be *found*. This form of "solution" is at the same time the very thing

that renders our psychical life valuable in respect to cultural progress. All "invention," in the broadest meaning of the word, scientific, theoretical, ethical, religious, artistic, technical, rests upon it. Here the concept of a determining tendency at work in the sphere of the unconsciousness seems to fail. Actually, however, it does not fail, as we see if only we look closely.

In order to understand this, let us go back to the foundations of philosophy and begin with some questions of mere terminology. We shall not, by the way, be very "modern" in this paragraph.

We shall, first, give a name to the unconscious *X* in which all the phenomena we have studied are happening. We call this *X* by its old name *soul* or *mind*, or, rather, *my* soul or mind. For psychology, so far, has been concerned only with what *I have* or *have had*, and therefore *soul* exists only in relation to "I" in its solipsistic sense,—for this part of the discussion at least.

We may say that *my soul* is the unconscious foundation of *my consciously having* in its totality and temporal sequence. In *my soul* there is continuous becoming, subject to certain forms

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of causality, while *I*, as we know, *have consciously* in a discontinuous form that is comparable to the sparking of an electric machine (page 46).

But, in this part of the book at least, we are not considering *my soul*, as an absolute or metaphysical reality. *My soul* is a concept of order, which *means* a certain realm or sphere of existence, *as if* it were independent, i.e., *as if* it were merely "Ego-possessed" in its being. But only *as if*. My soul as a concept remains *my* concept, my *immediate object*, but it is of the class of immediate objects which "mean" mediate ones, just as do all concepts that relate to what is called nature, or empirical, quasi-independent reality in space (and with relation to space), and as does the concept of *nature* itself.

Thus, then, I posit¹⁸ the concept of *my soul*, since I know by intuition that in this way there will be order in the totality of all *my having consciously* in the course of time. I intuitively "see"¹⁹ the form of order, *my soul*, as an unconscious something endowed with becoming and

¹⁸ In German: *Ich setze*.

¹⁹ In German: *Ich schaue*.

with special forms of causality; as penetrating, so to speak, the totality of my *consciously having*, past, present and future, and as uniting it into one great unity, but only *as if* it existed independently of my "having" it.

I speak of *soul* or *mind*, therefore, without hesitation, hoping that the reader will not overlook my critical reserve as to this concept. But I do not speak of "my consciousness" or "the consciousness," nor have I used in this book the customary phrase, "content of my consciousness." "My consciousness" would be a very misleading expression for the matter in question here, since the main point of our former discussion was to show that there is *no* becoming, no causality, no doing, no temporal continuity on the conscious side of psychical life. We need something unconscious to explain dynamically the sequence of conscious phenomena, and, of course, we should *not* call this "the consciousness."

But the term "the consciousness" as a substantive is misleading even in respect to *my consciously having* as such. It suggests a thing, and "I" is not even a quasi-thing. And certainly there is nothing like a conscious pot or cup "in" which

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there is something. With regard to the words *mind* or *soul*, it is likewise not quite correct to use the word "in," but the object denoted by them may at least be considered by analogy with something "in" which there is something else in the original sense of the word.

"The consciousness," then, is a bad term for the indefinable and irreducible *I*. Our primordial fact (page 1), *I consciously have something*, must here take the place of "the consciousness."²⁰ But let us go back to the problem of psychical causality, and discuss the questions which still remain to be solved, on the foundation of our new concept *my soul*.

We have asked the question (page 61): What about "determining tendencies," or the completings of complexes, when there is *no* anticipated schema waiting to be filled with content, either partly or completely? Here, in order to find a solution, we must go back to the very beginning of all philosophy. And a solution *must* be found, for otherwise our dynamic psychology would remain very incomplete.

²⁰ "The consciousness" is a quite impossible word for the *soul* or *mind*, which is most decidedly unconscious.

We remember that, at the very beginning of all philosophy, there is only the primordial fact: *I consciously have something* (page 1). But this primordial fact is not quite sufficient to support the whole grand edifice of philosophy. An addition not only must be given to it, but can be given: the something which I *consciously have* is *ordered*. *I consciously have a something in order*, the concept of order being itself inexplicable and indefinable, yet "clear and abstract," to use the phrase of Descartes, by immediate intuition of its meaning.

We now turn from this primordial fact and from "phenomenology" to psychology.

My soul is the unconscious foundation of my *consciously having*; thus it is "posited" in the service of order. My primordial knowing of the meaning of *order* and my primordial willing of order with regard to all possible contents therefore indicates to the Ego a certain primordial state and dynamics of my soul; my soul also is in the possession of order and can *make* order, for it has faculties of *making* and *doing*, called "willing" and "thinking" in the sense of activities, which the Ego does not possess.

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I may now apply some of our psychological results:

It is as if I were always standing "under the task" of finding *complete order*, and as if my soul were "solving" this task. "I" (and my soul) is *by its very essence* "under" this *primordial* task; it is in primordial and inexplicable possession of the primordial "anticipated schema" *order*, and the soul works according to it. "Everything that is consciously possessed must be looked upon as being in definite order"—this, then, is the primordial task.

And now, "under" this primordial task, special and definite anticipated schemata arise before me. They constitute the special determinated tendencies of which ordinary psychology speaks, and "under" which the soul is working (and *I* am consciously having), in science and in everyday life.

The first *invention* of all schemata, or, to put it differently, the *first intuition of problems*, arises out of the very primordial essence of Ego and soul. On the foundation of its primordial anticipated schema, *order*, the soul is establishing special and particular schemata and gives

them over to its particular dynamics for working. And, in correspondence to this, I have primordially by intuition the concept of order, secondarily, special problems of order, and tertiary, the solution of these problems, i.e., the filling out of the problems or mere empty schemata with special contents. From this point of view all concepts of ordinary psychology, such as production, association, limiting factors, directing factors or tendencies, and so on, become concepts of only secondary and, I might say, preliminary value.

There is only one concept in normal psychology which is quite final: *My ordered and ordering unconscious soul.*

Now, let us try to tell still a little more about the soul.

The soul must be regarded as a dynamic system endowed with a particular organization which corresponds to my possessing the primordial logical meanings or "categories" and the relations which are valid in their sphere.

We, of course, are able to discover this dynamic organization only on the foundation of the logical structure of our conscious contents,

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which is static. For we cannot investigate the *soul* as we investigate the anatomy of an animal.

Therefore everything in this field requires investigation by inference and analogy. And, furthermore, everything remains very far from satisfactory. For our mental organization, unfortunately, is such that it is able to approach the details of a given manifoldness only if this manifoldness is a manifoldness in space. But the soul and its organization is *not* "spatial." Strange to say, therefore, the Ego cannot investigate in full detail its own substructure! The Ego-part of the mind cannot really approach the full mind.

Another problem comes upon the scene: May not the organized soul have its *evolution* or quasi-embryonic development? Certainly it may. But so little is satisfactorily known about this, that we shall omit this topic from our discussions, the greatest difficulty being the question whether part—or even all—of the "embryology" of mind may not be embryology of the brain at bottom. But this can be fully understood only later on.

What, now, about the *causality* of the soul,

or, in particular, about the causal nature of any particular determining, directing tendency?

Is such a tendency a causal agent or factor at all? If we call *causal* anything that determines the quality of an event by its own quality, it certainly is. But it does not stand in analogy to mechanical causality. Mechanical causality, as I have shown elsewhere, is causality between singularities, such as atoms; association in its crudest form stands in analogy to such causality. Mechanical causality is not causality as such, but corresponds only to one of four *a priori* forms of causality,²¹ one of them being *individualising* or *whole-making* causality, realized, according to my system of vitalistic biology, in the organic world.

It is, to this schema of *whole-making causality*, then, that the causality of and "in" the soul may be said to correspond. But for the very same reason that the word "in" is here used, namely, that there is no better word, we are also unable to make out this correspondence in detail. Mental causality *shares* this disadvantage with any empirical illustration of individualizing

²¹ See my *Ordnungslehre*, 2nd edit., 1923, pp. 197

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causality. For, we may repeat, our mental organization is restricted, being able to get at final details only where there is spatial manifoldnesses and, therefore, strange to say, not with regard to itself.

Finally: Is the soul "conscious"? We have called it unconscious, so far. But this may only mean that it is not *I*, i.e., that it is not what I mean by the word "I." Does it possess another *I*, i.e., an Ego, that would, then be a real *alter Ego* with respect to the *I* proper?

We merely raise the question in this paragraph; for we do not yet know what the "other *I*," the *alter Ego*, means. In fact, it means nothing to us, so far, since our whole philosophy and psychology has up to this point been "solipsistic."

Later on we shall return to this big and curious problem. Thus far it has sufficed to regard the soul as a mediate or empirical *object* which is the "unconscious" foundation of the Ego that *has consciously*, and to regard the *concept* of "my soul" as a concept of order. "Object" and "concept meaning an object" must, of course, be distinguished here in the same way as, for

example, in dealing with the problem of "God."

So much, then, about the dynamics of inner psychical life. We shall now enter quite a new field of analytical research, a field that will require a number of quite new concepts. It is here that we shall turn to those problems which the text-books of psychology used to rank first, namely, problems concerning sensation, perception, moving power, and so on.

But the very first thing we have to do will be to introduce a certain concept which, strange to say, is best known in a popular way and is, at the same time, very difficult to deal with in a critical and analytical manner: the concept of *my body*.

4. SUMMARY

Before we begin our new analysis, however, let me sum up those three characteristics of modern psychology which constitute its very essence, and at the same time mark the great difference that modern psychology shows in relation to all earlier psychological doctrines that claimed to be scientific and of general validity.

The four chief characteristics are as follows:

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- I. The *inactivity* of the conscious Ego.
- II. Forms of *meaning* as being already present among the *elements* of psychical conscious objects.
- III. *Directing* agents in the service of *order* as the main factors in psychical, *unconscious*, dynamics.
- IV. The critical foundation of all and the starting point of the discussion, the *primordial fact*: "I consciously have something."

Of these four topics the first and the fourth are my own theoretical property, while the second and the third are the results of researches of a very different kind, in part logical, in part psychological, as explained in the beginning. The psychologists, Külpe, Marbe, Messer, Bühler, Ach, Koffka and Selz share the greatest honors in this field.

The systematics, i.e., the logical arrangement of the whole matter discussed so far, is, however, my own work. But I believe that not many of those who stand on the ground of "modern psychology" at all would reject the arrangement followed.

In the beginning of this book I spoke of the strange situation that, before about 1900, there should have been "two psychologies," the one scientific and universal, but incomplete, the other complete, but only the expression of the personal belief of this or that philosopher.

This impossible state of affairs has now been changed: We now *have*, at least, a psychology of inner life which is scientific, universal and complete at the same time. Our psychology is capable of explaining what is to be explained, i.e., our psychology realizes in full the scheme of order present in the totality of psychical facts. It is not forced to leave aside the main points, namely, meaning, and progress with regard to meaning, as was, strange to say, the older psychology.

Contents which have a meaning can never arise from elements which are meaningless, and enrichment in meaning cannot exist without dynamic agents directed towards it. This is the very point where the older psychology was insufficient. Modern psychology has filled the gap. The situation is, in fact, very similar to the one

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in biology: individuality can never arise from elements which are neutral with regard to it, and cannot be realized without individualizing dynamic agents.

Let us finally mention a very important consequence connected with modern psychology.

History and sociology, both taken in the widest sense of the words, are to a great extent, perhaps even completely, applied psychology. There may be features of super-personal wholeness and evolution in them that would not be explicable on, so to speak, a personal-psychological foundation. We do not know much about that, though we know that in any case a good number of such psychological facts, in the personal sense, are connected with both those sciences.

History and sociology, then, need psychology. But, of course, they need only a psychology of which they can really make use. Now the older psychology, with its very primitive theory of materials, and its unsatisfactory association theory, could not be used or "applied" by those sciences at all. Historians and sociologists,

therefore, did not care much for psychology, indeed they very often had a decidedly hostile attitude toward it. And they were right.

But now we have a new psychology, which not only may be applied, but must be applied. This means that the modern psychologist not only offers to the historian and sociologist a sound psychology, but also that he is entitled to demand that those scientists should really "apply" his psychology, and not put it aside as they have been doing heretofore. The modern psychologist may even dare to say that the work of the historian and sociologist may be helped enormously by such an application.

We shall learn, later on, that there is still another branch of modern psychology which is to be of great importance for history and the sciences connected with it. I am thinking of the psychology of what is generally called the subconscious. But it is certainly well to realize that "normal" psychology, pure and simple, has already changed its aspect to such an extent that it is not only able to serve but also entitled to demand that it be used.

Meaning or significance and enrichment in

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significance is almost everything in psychical life, in any case they are its most important characteristics. And modern normal psychology takes account of both. With regard to significance as such, modern psychology even tells us that psychical life *is* life in significance; for "consciously to have" *is* to have significances in *every* case.

II. PSYCHOPHYSICS

1. MY BODY

BODIES are parts of what we call nature. The concept of *nature* is a concept of *order*. By it, as my immediate possession, I “mean” a community of quasi-independent things and relations among things. A single constituent or part of nature, as, for instance, my work-table, is also “meant” in its quasi-independency as a *mediate* or empirical object. That by which it is “meant” is an *immediate* object, i.e., a *something* that is immediately had or possessed consciously, say the perceptive image or memory image of my work-table, or even merely the “thinking” of it. “Meaning” as an accent of certain psychical contents, then, belongs to the class of immediate objects; that which is “meant” is the mediate or empirical object. I “have” the mediate or empirical objects only in so far as I have immediate *somethings* possessing a *meaning*—accents in themselves. Meaning—accents, of course, are the same thing as what

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we have called in a previous chapter (page 21) accents of the sphere of existence.

But this discussion is only incidental. It merely serves as a short logical introduction into the realm of nature.

Bodies in nature are of greatly varied kinds. There are inorganic bodies and organic or living ones, both of them existing in many individuals which may be classified into species, genera, families, etc.

There is one single body, however, among the enormous number of bodies, which has quite a unique and exceptional position. It is an organic or living body; it even belongs to a well known group of these bodies, the human bodies, which, on their part, belong to the Primates, the Mammals, the Vertebrates. But in spite of this, the body in question is something else to me than all other bodies are. I am speaking of *my body*.

That which makes *my body* different from all other bodies is the immediate sensible data by which it is indicated to me. These data are in one respect poorer, but in almost every other respect much richer, than the immediate data on the basis of which I speak of a "body" as a special

constituent of nature in general, even of an organic, nay, even of a *human* body.

In the optical sphere the data which relate to *my* body are poorer than with regard to others, for *I* cannot "see" certain parts of my body, my ears and, in particular, my eyes, for instance, unless I use a certain apparatus called a mirror. In the motor or kinesthetic sphere the data are richer with regard to my body than with regard to others. In untechnical language, other bodies may be "touched" and give me a particular sensation or, in our technical language, *pure suchness* (page 12), in this case. But my body gives me sensations or *suchness* of particular kinds in correspondence with its various states: pain sensations, and sensations of being touched, each endowed with a special sign of localization (page 13), also visual sensations, and, finally, sensations with regard to the movement of the limbs.

In the strict terms of logic the situation is a somewhat different one, if not actually the reverse: There are very many *somethings* which I *consciously have*, all of the forms of *pure suchnesses* of greatly varied types, all in particular

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relations to one another. The total community of all this, including also faculties or "possibilities," is such that I see by intuition that it would give me a good instance of *order*, if I should posit a special concept on its foundation. I therefore posit the concept of order, *my body*, i.e., an immediate object of the class of thoughts which has the accent of *meaning* "my body" as a constituent of empirical nature.

All this is rather complicated and the reader may ask what these logical subtleties have to do with a discussion of psychological problems. But I answer, without hesitation, that we have founded our psychology from the very beginning, not popularly, but philosophically, and, in particular, logically, and that, for this reason, it would disturb the unity of the whole, if now, merely for the sake of convenience, we should speak of my body in the common and naive-realistic way, as of a thing that is self-evident.

By no means is the existence of "my body" a self-evident matter, so little so that, on the contrary, one might well say that *there is nothing so strange as the fact that "I" am bound to*

my body forever, during my life, and can never get rid of it—except in sleep.

And this, as we all know, is also one of the particular characteristics of my body in comparison with other bodies which we are able, when we do not care for them, to exclude from what we *have*,—by shutting our eyes, for example.

Not much critical insight is required to avoid confusing the meaning of the word *Ego* and *my body*; only a very unphilosophical mind would be likely to confuse the two. But, it seems to me, there are many persons who do not fully realize that *my body* is in fact my *object*, and that it is a *something* that is *consciously had* by “I” in the form of “being meant” in just the same logical sense as any other body is meant, and differing from other bodies only insofar as the number and quality of the immediate data which form the foundation of the concept *my body* are different from the number and quality of data underlying the concept *body in nature* in general. It is, in particular, the so-called kinesthetic data, including the local accents of Lotze (page

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13), that play the important part in the logical construction of empirical reality here, and *exclusively* here.

2. THE FUNCTIONAL RELATION BETWEEN BODY AND MIND

We now return to problems of psychology.

In the part of this book immediately preceding we have studied what we called the inner psychical life, and have been able to discover at least the most general causal laws which are responsible for its order, these laws being centered finally in the one and single concept, *my whole and whole-making soul*.

My inner psychical life *qua* inner life is now found to have points where it breaks up, where there does not exist any longer a continuity of content in it, where something alien, as it were, seems to invade it.

Everyday philosophy regards this problem very superficially, and does not see that there is any special difficulty in understanding the fact: I have *sensation* or a group of sensations, a perception, whenever there is any breaking, as it were, of my inner life. Nature comes into contact

with my mind; nature "acts" upon it. And this happens through the sense organs of my body.

All this, however, is far from being as easy and "self-evident" as it may seem to be to one who is unaccustomed to a philosophical way of thinking. On the contrary, some of the greatest difficulties of all philosophy are met with at this point.

What is actually true about the "acting of nature upon my mind by the sense organs of my body," is the following:

There appear before consciousness many contents which are certainly not explained on the basis of either the acting of my whole, and whole-making, soul in general or the directing activity of a "determining tendency" in particular, as, for instance, when I "see" a flash or hear a motor car passing my house. I know by experience that whenever such a content appears, something always happens in a sense organ, a nerve, and a part of the brain as well. Or more strictly put, I know that in this case I *might immediately have* a certain something which I refer, by the function of "meaning," to the parts of the mediate or empirical objects just named.

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For surely I can imagine that I *might* "see" the changes which occur in my eye or ear, my optic or acoustic nerve, my optic or acoustic brain sphere, at the time that corresponds to my seeing a flash or hearing a motor car.

There certainly is a *functional* dependence, in any case, between my consciously having a certain complex of *pure suchnesses* and the quasi-independent happening in certain parts of my body, the word "functional" being taken in the neutral, mathematical sense of the word, which is beyond the concept of "causal" dependence and stands on quite an indifferent level. In a merely provisional way we therefore may say, roughly, that it certainly is *as if* nature were acting upon my mind, leaving open the question whether such an "acting" really does happen. Psychophysics is the science which tries to investigate all such functional dependences, and all details connected therewith.

Here we should pause for a moment to note the difference between our conception of psychophysics and that of the ordinary text-books in psychology.

Most text-books in psychology, though not all, stand on a "naive-realistic" platform. They regard "my body" as an accepted, self-evident fact; they take it as "existing" without asking what that means. They then generally begin with the genesis of "sensations" in the psychophysical sense, regarding this as the introductory chapter to psychology. You will have observed, however, that we have proceeded in just the reverse order. For the change in time of *my having something consciously* has been the starting point of our psychology, leading ultimately to the concept of *my soul*, "whole and whole-making" in a dynamic way. We introduce psychophysics only because we are forced to do so by certain facts, namely, the impossibility of explaining the appearance of *all* conscious contents on the foundation of the concept of *my soul* with its inner dynamics.

The conditions in modern psychology are similar to those which prevail in modern logic. Traditional logic began with "things" and went on to "concepts," while modern logic begins with "significances" and proceeds to "things."

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The older psychology began with sensations coming from the action of things, while modern psychology begins with my having all sorts of contents including significances, and then proceeds, because it is compelled to do so in the service of order, to create the strange object, "my body," and to posit the concept of *sensation* in a rather complicated way.

3. SOME PARTICULAR PROBLEMS OF PSYCHOPHYSICS

We now come to the psychophysical part of psychology, which used to be treated in the text-books at considerable length. We shall only mention the problems that are especially concerned here, adding here and there a few critical remarks. The text-books offer sufficient evidence in these cases and may be recommended to the reader without hesitation in this respect, if only he does not forget the naïve-realistic basis of those books, which is harmless in case it is thoroughly understood as the abbreviation of a rather complex relation of logical conditions present.

Let us then mention a few of the most important problems.

A. Weber's Law

What is the relation of an increase of the intensity of a physical stimulus to the increase of the intensity of the corresponding sensation?

The answer is, as we know, this: While the stimulus increases in a geometrical progression—(1, 4, 9, 16 . . .)—the intensity of the sensation increases arithmetically—(1, 2, 3, 4 . . .).

The law does not hold for very weak and very strong stimuli. And there are certain difficulties. Firstly, there is the question whether sensations, i.e., pure “suchnesses” consciously had, have any “intensity” at all. Bergson denies that they have, and regards every so-called intensity of a given quality, say, a specific red or the musical tone *do*, as a particular quality which is specific in itself. But it is my opinion that we may speak of *the same* “*do*” in various intensities. It is difficult, secondly, to determine what is to be regarded as the unity, as the “one more” in the scale of intensities in the realm of a given sensa-

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tion quality. The power of exact measurement is certainly not given to us, and so far Bergson is right. What we are able to regard as "just more" in correspondence to various stimuli is generally considered as unity; but the problem is whether the "just more" is always the same "more" in the scale. And the concept of the so-called *Schwelle* or threshold is also not without its complications.

B. Johannes Müller's Law of "*Specific Sense Energy*"

The term "energy" is, of course, misleading; what is meant is potency or faculty.

According to Müller each sense-nerve or even each fiber of each sense-nerve answers to a stimulation with a fixed sensation, quite regardless of the kind of stimulation, whether "normal" (adequate) or "abnormal" (inadequate). This given and innate specificity of the fiber is later on projected, so to speak, to the brain. The system of brain cells is here regarded as being absolutely fixed in its single parts with regard to the faculty of promoting sensations.

This theory is no longer held to be absolutely

true, at least as regards the single fibers or single brain cells. There seem to be important differences in the process of nerve irritation itself, the same fiber being able to carry various stimulations, the same brain cell to give various sensations according to the way in which it is stimulated. This certainly holds in the range of one sense sphere, but perhaps the whole brain is "equipotential," in the new-born child and is *made* different only in the way of functional adaptation.¹

But whatever may be the case, there *remains a certain truth* in Müller's law, though a truth rather different from what Müller himself regarded as true, and that is the following:

Whether Müller's law be right, or whether it be partly or completely wrong, in *any* case it is a logical postulate, resting upon the principle of universal determination that *any final definite state in the brain as a material system* corresponds to a *definite sensation as a conscious content*.

The "clepistic" final state in the brain is,

¹ See my *Philosophie des Organischen*, 2nd edit., 1921, pp. 366 ff.

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in modern terms, a certain definite arrangement and motion in a community of electrons. Whether, then, this state be the effect of a given potency being merely *awakened* by any kind of stimulus at all, as Müller supposed, or whether it be *made* what it is by a stimulation with specific qualities, in any case this state as a definite *status* corresponds to *some* certain and definite sensation and to nothing else. This is the psychophysical postulate of the theory of sensations.

C. Sensations with a Spatial Characteristic
Spatiality as such belongs, as we have found (page 14), to the material elements of what is consciously possessed and, therefore, cannot be dissolved or explained in any way. To this extent so-called "nativism" is true.

The local accents in the sphere of the sense of touch are "innate," and so are all optical data with their accents "outside" and "long and wide," and all kinesthetic data with their "three dimensions."

But so-called empiricism with regard to spatial experiences is also true in a certain respect, namely, with regard to details in the sphere of

spatiality. For, though I have the meaning of *outside* in an innate way, I must learn about the "how far outside" and about the "one *behind* the other." Much confusion arises in this field.

Firstly: I never "see" an ordinary body, *qua* body, say my inkstand, though I *have it consciously* by the function of "meaning an empirical object in its singleness and quasi-independence" (page 85). *Secondly*: That immediate object by which I "mean" the mediate one, the inkstand, I do *see*; but this also is *seen* by me not in its three dimensions but only in two, i.e., as a plane of specific color, form, and clearness. Its third dimension, the dimension of depth, I *have*, not in the optical, but in the kinesthetic way, namely, by having some bodily sensations in my eye as a whole in the way of "accommodation." We are so accustomed to accommodation, that we are almost always tempted to believe that we *see* the third dimension, while as a matter of fact we merely have it kinesthetically. Also, while looking through a stereoscope we do not see the third dimension, though we *have* it; for in this case we accommodate also.

Other means by which we learn to judge about

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distance, besides accommodation, need not be mentioned here. Painters know a good deal about such means—for example, that remote objects have a certain blue color, *as we know from experience*.

D. *Action*

The opposite of sensation is *action*. My body, while receptive in sensation, is also active. The one is the reverse of the other. Roughly speaking, there is, in sensation, the sequence: stimulus; irritation of sense organ, sense nerve, center; affection of mind, i.e., sensation; in action the sequence: "will"; affection of brain center, motor-nerve, muscle.

Again we should be careful to take this statement only for what it is, namely, an abbreviation of a complex of relations. In any case there exists a functional dependence between my willing something and a certain state or event, practically almost hypothetical, in a certain part of the brain of my body. When this is given, everything else is left to itself.

The psychophysical postulate (page 98) in

this case compels us to consider as univocal the relation between "will to do *this*" and "existence of *this* condition in the brain." Thus the corresponding reverse of what happened in sensation is realized.

But there are some complications, which, at least at first glance, render the comparison between sensation and action a somewhat more difficult and complicated subject than sensation was.

In the field of sensations I come into possession of a fixed and definite content, say red, as soon as a fixed and definite part of my body's brain has come into a certain condition, be it according to Johannes Müller's law or in a different way. But *what* do I *will*? To write a letter, for example, but *not* to move this muscle of my hand, nor to cause the innervation of a motor nerve or the irritation of a certain locality of the brain. I do not even know anything about those things unless I am a physiologist.

We, therefore, must change to a certain extent our whole conception of what happens in psychophysical life in order to discover a simi-

larity between sensation and action—a reversed similarity, of course—and in order to bring the psychophysical problem of action to a solution at all.

Let us, then, say in the first place with regard to sensation that it is not the “I have consciously red” that is the main point on the psychological side, but a certain state or condition of *my* (unconscious) *soul* of which “my” conscious content is a mere index. It is the state of *my soul* that ultimately stands in functional univocal correspondence with a certain state of my brain. And in volition it is again a certain state of *my soul*, of which my “willing something” is but an index, that is in functional correspondence with a certain state in my brain,—in the motor sphere this time.

Thus the difficulties seem to disappear, including a difficulty with regard to sensation which we have not mentioned so far, namely, the fact that I see, say, a red flower outside in space, but do not see my optic brain center in a state of irritation. To this topic we shall return.

There is, then, a double pair of functional

correspondences, strictly speaking: The one between state of brain and state of soul, the other between state of soul and conscious contents. This holds for both sensation and volition. To connect the conscious contents immediately with states of the brain leads to difficulties, especially in the realm of volitions.

Once more I lay great stress upon the point that, so far, we have spoken only of *functional correspondence* or dependence between psychical and physical states, but not of "causality." The problem as to whether causality exists between the physical and the psychical side of empirical reality or not, and what the relation between the two might be, if there is no causality, will be discussed later.

It has been our purpose to show that what we have called the *psychophysical postulate* can be made clear in the field of volition as well as of sensations. And this purpose has been fulfilled, it seems to me, at least in the most general outlines.

So much concerning problems peculiar to psychophysics. Only a few of these problems

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have, however, been mentioned. There has been omitted, for example, the question, much discussed nowadays, whether complex external stimuli act upon the psychophysical entity as the mere *sum* of their parts, or as *wholes*. This question, which is very important, will be properly explained later in connection with a much wider problem. And there are many other problems that we have omitted intentionally.

We might now proceed to the famous "mind-and-body" problem in general, i.e., to the question whether, to put it in the usual form, there exists a "psychophysical parallelism" or a "psychophysical interaction," were it not that a certain very fundamental concept, and at the same time a very popular one, has so far not been used by us and has been mentioned only incidentally without going into details. That is the concept of the *other Ego*.

As the establishment of this fundamental concept will make the following explanations much more simple and less artificial, so to speak, we now interrupt the treatment of psychophysics for a while, promising meanwhile to return to the subject on a broader basis.

4. THE "OTHER EGO"

That *I* am not the only conscious subject, but that there are many such subjects, not alone other human beings but also many animals, is regarded as a commonplace by almost all people; and among those who regard the existence of other Egos as self-evident are many scientists, even psychologists. It does not necessarily do any harm to their work if the latter do so look upon the matter in question. The psychologist needs as little to be critical, as does the physicist or chemist or biologist. But no scientist can claim to stand on a philosophical platform if he avoids criticism.

Our aims in psychology are, however, decidedly philosophical. We are therefore not allowed to speak of "self-evidence" here. On the contrary, we are faced by a problem, and, indeed, by a very important one.

But we are not yet concerned with metaphysical problems in this part of the book. When we ask whether we are entitled or not to speak of the *existence* of other Egos, we understand the word "existence" in the empirical sense, i.e., in the sense of the pure theory of order.

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Are there, in the empirical sense of *being*, "subjects" among our "objects"? That is the question.

It used to be the custom to deal with this question on the basis of analogy, and the whole problem, until lately, appeared to be a comparatively simple one. It was argued:

Here is my body in connection with, no matter what the nature of that connection may be, my soul and my *conscious having*. There is another body, very similar in form and behavior to my own. *Therefore* there is also a soul and a *conscious having* in connection with it. Or, briefly: My body is to my soul and "having" as your body is to yours: $b_1:s_1 = b_2:x$.

This rather primitive way of putting the matter takes it for granted that, with regard to "the other" we are able to know *immediately* something about his body and its behavior and about nothing else. This, in fact, seems a sound position to take as long as we are occupying the position of the man of pure science. And yet the problem is possibly not so simple.

Theodor Lipps was the first to see difficulties in the way.

The assumed relation: My body: my soul and my "having" = your body: your soul and your "having" is, he says, by no means correct. For "your soul" and "your having" is not in any way a clear concept. In any case its *conceiving* requires a particular faculty of myself, which Lipps calls *Einfühlung*, a term used rather often in esthetics. We may translate it by *introfeeling*. I project *myself* into the alien body and then denominate by the short word "you" the rather complex idea: "I could imagine being connected with that alien body. If my body would show such movements as the other does, I should possess such and such conscious contents."

But the word "introfeeling," it seems to me, does not carry us very far forward.

After Lipps, Scheler advanced the theory of the *immediate perception* of the "you." Not by the aid of our sense organs of course, but by a certain inner "sense" we possess, or, as he put it, the faculty of "perceiving" immediately the other Ego in its distinct singleness. Later on Scheler modified this theory, accepting only immediate aprioristic knowledge about what might be called mental or spiritual *otherness* in

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general. Not the "you" in this special case is immediately perceived, he now said, but on the occasion of perceiving another organic body and its behavior we apply, so to speak, the aprioristic category of *mental you-ness*, and then say: "There is a you." This theory resembles very closely that of J. Volkelt, who speaks of an *original you-certainty* (*Ursprüngliche Du-Gewissheit*) which is, not explicitly, but implicitly, innate in the same sense in which all categories may be called innate.²

What, then, is our own opinion about the subject?

Certainly there are some kinds of original feelings that have what may be called and has been called a *cognitive* function. Moral feeling is the strongest and most important of these; for it certainly goes beyond the "I," and implicitly refers to the "other." Indeed, it is meaningless and senseless without this latent implication. It is, like instinct, directed, not towards a particular object, but towards a certain possible group of objects that have the form of mentality.

² Literature in my *Ordnungslehre*, 2nd edit., 1923, pp. 371 ff.

In this sense we might agree with Scheler's fiction of the "new Robinson," but in this sense only. Imagine a new Robinson, Scheler tells us, i.e., a human being, who from babyhood has lived alone on an island, deprived of all association with men and animals. Such a being would *know* that he forms part of a spiritual community without any experience, and, when he saw an organic being for the first time, he would call it at once a *you*. The transsubjective innate logical scheme would be filled with content.

I think this is true. But Scheler goes still further and tries to separate the category of "youness" from the category of morality. In order to see whether this is possible or not let us study the strange faculty of *understanding the expression of other faces* and the faculty of *imitation*. These faculties have by no means been studied to the extent they undoubtedly deserve.

It seems, in fact, as if the young human child, the real "baby," possesses the ability, firstly, to interpret the expression of the faces of other people with regard to the feelings they represent, and, secondly, to imitate in its own face what it has seen. Both abilities are quite wonder-

ful and not very easy to explain by ordinary methods.

The faculty of interpretation may be explained, however, in some such way as this: When the mother smiled the baby got something good; when she looked angry, it was, perhaps, beaten. But even this would not explain the introjection of a *feeling* into the mother.

But the faculty of imitation is not even "explainable" in part. The baby has seen other faces smiling but never his own; and yet it can imitate smiling, nay, quite specific movements of a face which it has seen, as, for instance, rolling out the tongue, and pouting the mouth. And even if it had *seen* its own face smiling or rolling the tongue or pouting the mouth, how can it know how all this is motorially performed?

There seems to be an innate faculty of reacting to stimuli of a certain definite form or rhythm by actions of the same form or rhythm, though the stimuli, of course, belong to the sense, the actions to the motor, field. This innate faculty of correspondence between mere forms and rhythms exists only in a most general and

schematic way, as a general impetus or quasi-instinct, we may say. As an example, think also of the strong impetus you feel to move your feet or fingers in a rhythmical way, whenever you hear music.

If now we turn back to the problem of "the other Ego" we may say that in the general faculty of imitation something is present that refers to *otherness* in general and, as far as the understanding of the other face's expression is concerned, to other psychophysical beings in particular.

We possess, it seems, a sort of dim instinctive knowledge of general "you-ness" in a primordial way, and it is on the foundation of this quasi-categorical aprioristic knowledge as well as on the foundation of analogy that we conclude that there are particular other Egos, connected with the bodies of other human beings and of animals; or, that there are *subjects* among our (empirical) *objects*.

The analogy theory is not wrong, but it is incomplete. It requires the general sphere of "spiritual otherness," a category of "region," as

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Husserl might say, just as special geometrical forms require the general sphere of space, and as the specific "local accents" of our sensations of being touched all refer to the general sphere *my body's surface*.

So much, then, concerning what may be called the psychogenesis of the concept of the *other Ego*. Much is still in question, but it seems that we are on the way to a solution.

We now have to do with a rather different question, namely: What does the concept of "other Ego" mean *logically*, i.e., as a concept of order, which it certainly is. This problem of the logical and epistemological significance of a concept is very different from the psychogenetic one. The psychogenetic theory of a concept may be what it will, but the logical character of the concept as such, its meaning in the realm of a theory of order, is not thereby disclosed.

In order to find out the real logical or ordering essence of the concept *other Ego*, we must not forget that we have already established critically the two concepts of nature, or empirical reality in space (page 70), and of *my soul*

as the unconscious foundation of my *consciously having*. On the foundation of these concepts our present problem is not very difficult to solve.

Nature was found to be the community of those mediate distinct objects in space or in relation to space which are *meant* by immediate objects *as if* they (the mediate objects) were independent in their being and becoming. *My soul* was found not to contain very clearly single distinct objects; in any case we were unable to discover such objects in detail. But *my soul* as a whole was also a *something*, of an unconscious and non-spatial kind, of course, that was "meant" by immediate indexes *as if* it had being and becoming in itself. It is to be noted that the words "as if," as used here, exclude any sort of metaphysics.

We are now well prepared to tell what the concepts *other Ego* and *other mind* mean:

The organisms, in particular human beings and animals, are mediate or empirical objects of nature, regarded *as if* they were independent in their being and becoming, *and as if they were standing in mutual functional dependence with*

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a something that is like my soul and my Ego. This is what is meant whenever the term "other" psychical being is used. The double *as if* is important.

We now have, in the sense explained, psychical *subjects* among our (empirical) objects. We must have these *subjects*, of course, for our dealings with history, sociology and even, in part, biology. After this we may therefore speak of *many souls*, and not only of *my soul*, as before. This will give to our whole discussion a greater freedom of expression. We may express ourselves at least *as if* the boundaries of pure solipsism were broken—although they are, of course, not broken in the real sense.

But before dealing with the nature of souls in general we have to pay our last tribute to psychophysics, which we have left facing its greatest problem: *Mind-and-body*.

What, then, shall we be able to say about the question implied to these words? Shall we be able to say anything more than that there is merely a "functional mutual dependence" between body and mind, the word functional again being taken in the neutral mathematical sense,

and not as suggesting the concept of causality?

5. MIND AND BODY

A. The Theory of Psychomechanical Parallelism

During the last few decades of the nineteenth century the official theory as to the relation between mind and body was the theory of so-called *psychophysical parallelism*. Recently this theory has been attacked from many different sides, to the extent that at the present day it has been almost universally given up.

The parallelistic theory of the relation between mind and body maintains that there is no state or event in the soul and, therefore, no conscious state either,³ which is not accompanied by physicochemical or, in short, mechanical states or events in the brain, the latter being regarded as a true mechanical system. The term psychomechanical parallelism is preferable for what is really meant.

It should be stated, however, that there are varieties of parallelism: There are some psychol-

³ Conscious "events" do not exist, as we know. I merely *have* consciously.

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ogists who reject the concept of the unconscious-psychical and who hold the view that only psychical *states* of the conscious form have their parallels in states of the brain, there being no psychical *events*, as there is no "unconscious" psychical sphere. On this basis the continuity of the psychical breaks down completely; it is nothing but an addition, a rather luxurious one at that, to certain states of a given dynamic mechanism. The name Epiphenomenalism has been given to this theory. The main thing is the brain and the mechanical events in it; only here is there becoming and causality.

Parapsychism is another form of parallelism. In this variety the statement of ordinary parallelism is enlarged. Nothing on the psychical side without its mechanical parallel, but also nothing physical without psychical correspondence.

This specific theory generally forms part of a metaphysical system. But it must be stated, once for all, that by themselves all varieties of parallelism *may* be taken quite unmetaphysically—in other words, they are compatible with every epistemological standpoint and need not be taken metaphysically. We shall now try to

find out what may be called the roots or sources of psychomechanical parallelism, i.e., the reasons, historical as well as logical, that have led to its being a widely accepted theory.

Historically the philosophy of Spinoza is the father of parallelism. For Spinoza, as is well known, there exists one last substance with two "attributes," *extensio* and *cogitatio*. This substance is pictured as it were, equally well by the totality of the "modi" in the realm of each attribute. That means that the totality of all states and events in space and the totality of all psychical states and events illustrate the substance equally well and completely. In the last resort we have to do with "one and the same thing, expressed in two different manners."⁴ For this reason, then, there is correspondence between the realms of the *Extended* and the *Thinking*, but not interaction.

We now come to the first of the logical sources of parallelism. It stands in close relation to the reasons which have made Spinozism its father. Only on the foundation of psychomechanical parallelism would a mechanical system be with-

⁴ *Una eademque res, sed duobis modis expressa.*

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out any gap; and, on the other hand, Spinozism is the most complete and coherent metaphysical foundation of any theory of natural mechanism.

Certainly, the universe would appear most simple if we were able to regard nature in this way. But, certainly also, simplicity is not an absolute criterion of truth. We are only allowed to say: Let us accept mechanism, on the guiding principle of simplicity, *if we can*, but *if we cannot, then* let us reject it. Geometry also would be more simple if there were only two dimensions of space, but there *is* the third dimension.

There is, finally, another logical root of the parallelistic theory, i.e., another logical argument in favor of it. This has been acquired through analogy:

We have discussed the *psychophysical postulate* in the realm of sensation and volition. According to this postulate: However we conceive the function of nervous conduction and brain irritation, whether along the lines of Johannes Müller or in a different way, in any case there is, in sensation, a univocal relation between a certain distinct final material state in the brain and a definite sensation, and, in volition, between

a definite state of *my soul* (the index of which is my having a certain will) and a certain distinct first material state in a definite part of the so-called motor-spheres of the brain.

From these facts, resting on an *a priori* foundation, certain authors have drawn the conclusion that the same sort of univocal correspondence that exists between the final material brain state *and* sensation on the one hand, and between volition *and* first material state of the brain on the other hand, must be present with regard to *every something* which *I consciously have*, whether a feeling, a thought, or anything else. Also, the unconscious psychical processes that connect the conscious states are also believed to have their physical parallel in events inside the brain, the latter being considered a mechanical system.

Of course, the question of the possibility of various forms of the parallelistic theory here comes upon the scene *again*. In fact there are some who deny unconscious psychical becoming altogether, and who regard the conscious states both as epiphenomena to the mechanical cerebral states, and as lacking any real connection

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inter se. But epiphenomenalism is not a necessary consequence of the hypothesis in question, which certainly may also be taken in the original Spinozistic sense.

Let us, then, analyze this important problem in greater detail. We ask: Is it possible to carry through the analogy in question? Is it really true that, on the foundation of the "postulate" of psychophysics, which, no doubt, holds good for sensation (or perception) and volition, every single conscious content of inner life has its "parallel" in a certain material state of the mechanical system called *my brain*?

It may be that by answering this question we shall also be able to solve the problem as to what sort the so-called "functional univocal mutual dependence" between mind and brain in sensation and volition may be, i.e., whether it must remain merely "functional" or acquire a more particular character.

We may put it this way: We believe that we are able to show that the analogy in question does *not* hold for the states of inner psychical life and that, besides, it *is* possible to put in the place of the word "functional" a more definite

expression, though not, perhaps, the much too simple phrase psychophysical "interaction."

We shall begin with simple and indefinite topics and shall proceed to complex and definite arguments against psychomechanical parallelism. Or, in other words, we shall begin with mere indicia and shall proceed to real proofs.

In the first place, then, we are discussing merely the *difficulties* of the usual "parallelism." It will soon appear that we have at hand the materials for a solution of our problem. We need merely use what we have learned before.

B. Arguments and Proofs against Parallelism
i. Memory images and originals compared.

If psychomechanical parallelism were true, we ought to expect that there would be a strict correspondence, a sort of photographic identity, between memory images and their originals, i.e., perceptions. There might perhaps be certain gaps in the image, compared with the original, but nothing else. For, if the image is conditioned materially just as was the original, then the advocate of the mechanistic theory must assume that the image is dependent on the same material

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state as the original, and that it owes its peculiarities in content to the same sort of material stimulation as the conscious original did, although the stimulation may be weaker. But we know from further discussions (page 65) that such an identity is by no means the case. There are not only gaps in the image, when compared with the original, but the original has been spoiled and distorted; it is an incorrect copy, and yet it is individual in itself.

From this fact we have drawn the conclusion that the unconscious *X* or, as we are now entitled to say, the *soul*, does not *re-produce*, but *produces*. We may now add to this statement that it is hardly possible to infer a mechanistic analogy for something which is production and not mere reproduction.

The parallelistic theory, in this case, might possibly be saved by additional hypotheses. In any case there is a difficulty, and we need not say more. For, on the basis of the theory, we ought to expect "photography," with certain gaps in the copy perhaps, and this does not exist.

ii. *The recognition of the same in various absolute expressions.*

Imagine any melody you know well, say the beginning of a movement of a symphony of Beethoven. The melody will be recognized as *the same* even if you hear it in a different key. A picture you know well will be recognized as *the same* if you see a small photograph of it. Two pictures, one in red and one in blue, are also *the same* picture.

Here we meet another great difficulty of parallelism as conceived mechanically, and at the same time we meet the problem of *individualized stimuli* or form-stimuli (*Gestaltreize*-Ehrenfels), which is much discussed nowadays, and which will occupy us at greater length later on.

According to parallelism the first hearing or seeing of the melody or the picture would impress the brain in a certain definite way, so as to make a definite *engramma* (Semon) upon it, and the process of recognition, of saying "the same," would depend on the stimulation of this very engramma. But the stimulus must engrave an-

other engramma into the brain, if it is offered the second time on a very different scale, be it musically or geometrically or with regard to color!

The difficulty becomes even greater if we call to mind the results of a fine experiment carried out by E. Becher. Becher arranged his experiment in the following way: He presents to the eye of a person a certain small figure, say, an arrow, in such a way that the irritation of the retina is clearly localized. Then, the second time, he presents the arrow again, but the person to whom it is shown is told to keep the eye firmly fixed, and arrangements are made so that this time another locality of the retina is stimulated. In spite of this the person says: This is the *same* arrow I saw before.

What about *engrammata* in this case? They are certainly in different localities. And yet the person says: "the same." But in this case also parallelism in its usual form *might* be saved by certain additional hypotheses and, therefore, we do not speak of proof, but merely of an "indication" against parallelism.

iii. *The insufficiency of the association theory.*

We know already that the theory of association is not sufficient to explain what really happens in inner psychic life (page 50). Mechanical parallelism could *only* use this theory to explain what happens along its psychical "parallel." Its physical "parallel" works mechanically, and the association theory is the only one in accordance with which the psychical side would, by analogy, work in the same way. This, of course, is perhaps even more than a mere "difficulty" for parallelism.

An argument rather often heard against parallelism is that on the basis of this theory life would be deprived of all charm and pleasure. It is asked: What about the "value" of history, art and ethics, if psychical life is only parallel to the action of a mechanical automaton? This, however, is an argument *ad hominem*, but not a scientific argument, and therefore we merely mention it.

Others say that consciousness becomes superfluous on the parallelistic basis. But perhaps it is a mere luxury. Who knows? The problem,

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whether it is or not, must be decided scientifically, and the decision would have to be accepted even if it were disagreeable.

And to the argument that, on the theory of parallelism, history would be, without consciousness, what it now is, we may simply answer that, as the universe is, consciousness exists, and that the universe exists only once. It is nonsense to speak of another "possible" universe.

Thus the arguments *ad hominem* may be left to themselves. What is important and scientific in them narrows down to the point that the association-theory does not explain the origin of the *need*, in science, religion and ethics.

Most of the *ad hominem* arguments, by the way, do not relate to the parallelistic theory in particular, but to the much more general problem of determinism, which, as we shall see, might be true even if mechanistic parallelism is wrong. And consciousness proper might also be "superfluous" upon an anti-mechanistic basis.

iv. *Action as a non-mechanical natural phenomenon.*

We now proceed from mere anti-parallelistic

arguments or indicia to real proofs of the impossibility of the parallelistic theory. These proofs are of two very different kinds. In the first place we shall investigate whether a necessary consequence of psychomechanical parallelism is realized or not. We shall show that it is not. In the second place we shall compare the very essence of "the physical" and "the psychical," or of nature and mind, with one another, and shall be able to prove that this comparison makes the theory of parallelism absolutely and definitively fall through.

First, then, we have to do with a certain *consequence* of the theory.

Parallelism, as understood so far, pretends to be a *psychomechanical* parallelism. This implies, of course, that the physical "parallel" is of the type of mechanical states and events. The *actions of men* are the point in question, regarded as natural events. If, therefore, we can show that the action of man, regarded as a physical event, cannot be a mechanical event, parallelism in its usual form is disproved and refuted. For, according to a fundamental logical principle of the theory of conclusions, he who

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proves that a consequence of a theory is not realized, proves at the same time that the theory is wrong.

The "consequence" in question, then, is the nature of human action as a physical process. Can this be explained mechanically or can it not? If not, mechanistic parallelism breaks down.

Quite intentionally we are here entering the field of the science of nature. All science of nature has to do with matter in motion and with nothing else. Matter in motion may follow mechanical or vital principles; for, in saying that a "system"—to use the expression common to physics—is a *material* one, nothing is said about its being *mechanical* or not. This is a separate question.

It is not very easy to regard the "acting man" from the point of view of pure natural science. We are too much accustomed to regard him at the same time as a psychical being also. But we are not allowed, in this chapter, to do this. The acting man, to us, is "matter in motion." What laws govern the motion? This alone is our problem. All psychological concepts,

therefore, have to be excluded; we are not, for instance, allowed to speak of "memory," "understanding," etc.

As I have fully dealt with this problem in my *Science and Philosophy of the Organism* I may be allowed to discuss the whole problem here in a curtailed way.

We make a sharp distinction between *faculty* of acting and *realization* of this very action at this very moment, and shall first discuss the one, then the other.

How is the *faculty* of acting of a given human being at a given time of his life to be characterized? On what, we may also ask, does this faculty depend, if by "faculty" we mean the sum total of all actions which this man *might* carry out at this given time?

The answer is that his specific faculty of acting has been historically acquired. It, in fact, depends on everything that has happened to the "material system" in question, namely, the man; it depends on his individual life-history with all its contingencies. Take, for instance, a baby: You know that this baby can be "made" a man who speaks English, or German, or French, or

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Chinese, or Russian according to circumstances. In the common expression, we say that he "learns," that he has "memory" and acquires "experience." But we are not allowed to use these words, by self-restriction at this point, and must therefore put it neutrally.

The faculty of acting represents a historically acquired basis for future reactions; or, in short, *historical basis of reactions* is the first criterion of acting, relating to possibilities.

Now it will probably be said that this is just what mechanism requires. For there is a well-known machine, the phonograph, which also reacts on a "historically acquired basis," its reactions depending on what it had received in the past. This is quite true, and yet we should not care to say that an acting man is about the same as a phonograph. Perhaps we might say that an actor on the stage or a schoolboy reciting a poem has a certain similarity to a phonograph. But the man "acting" in the ordinary way, say during a conversation, in which he "asks" and "answers," is different certainly from the actor and the schoolboy.

What, then, is this difference and at the same

time, in even a stronger sense, the difference between the acting man and a phonograph? The difference is this: The phonograph throws back in their very specificity all the specific events it has received, while the man in action may resolve the specificities received into their elements and produce new specificities out of them. The phonograph, therefore, though also endowed with an historical basis of reaction in a certain sense, has a strictly *specified* basis, while man possesses a basis that may properly be called: *specified without strict limitation*.

We pause for a moment and ask whether there exist in the inorganic world machines endowed with a basis of reaction which is historically acquired by chance, and the elements of which may be newly combined in future reactions. We do not know of any such "machines." But we do not lay much stress upon our not knowing, for the present, and prefer to go on with the analysis.

We now have to do not with a faculty of acting in general, but with the *realization* of this very acting at this very moment. How is it characterized? On what does it depend?

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Action is a reaction to a stimulus on the part of an organism, consisting in motions and resting upon a basis of faculties acquired by the individual history of the performer. This is what we know, so far. Let us now study the stimulus and the motion reaction, which are in question, a little more in detail. This may bring us to the discovery of a sound characteristic of action, as far as it is not only possible, but realized.

Stimuli and reactions are almost always not simple, but complex. This means that the stimulus does not consist in one single "seen" or "heard" quality, and the answer to the stimulus not in the contraction of one single muscle, but stimuli as well as reactions are combinations of singularities. What, now, about the relation in which both combinations stand with regard to one another?

In the inorganic world we also meet complicated systems standing in mutual causal relation. But the sum total of causality, starting, say, from system *A* and affecting system *B*, is pressed together, as it were, into what is usually called the *resultant*. The same *resultant* may

“result” from very varied complications, the best illustration of this concept being given by Newton’s principle of the parallelogram of forces. And, on the other hand, we are not able to learn, from our knowledge of a given resultant, from what combination it has come. To put it briefly: In mechanics all details or singularities of causality *disappear* in the resultant.

So much about what might be called “stimuli” of mechanically combined systems. In order, now, to study the stimuli concerned in action we had best start with a concrete instance, say a conversation between two friends.

We easily see that the concept of a *resultant*, in which all details disappear, does not come into account here. Take, for instance, the action-stimulus expressed in the words *My mother arrived this morning*. Of course, what the “stimulus” is here, in the strict sense of the word, is the physical sequence of air vibrations corresponding to the phrase in question; for we study action from the point of view of science, as we know, and not psychologically. We may say, then, that in action the physical resultant of the

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physical stimulus does not play any rôle whatever; that, on the contrary, the details of the complex stimulus are of importance.

But in what sense? Certainly not in isolation, but with regard to the proper and specific place in which they stand in respect of the total stimulus. For, on the one hand, instead of being *My mother arrived this morning*, the stimulus might have been *Meine Mutter kam heute Morgen an*, or *Ma mère arrive ce matin*, without changing the effect, if it be supposed that the person addressed in the conversation has a particular sort of "historical basis," or, to put it less technically, that he "understands" German and French as well as English. On the other hand, *My mother arrived, etc.*, and *My brother arrived, etc.*, are by no means equivalent stimuli nor are *Meine Mutter, etc.*, and *Deine Mutter, etc.*, *Ma mère, etc.*, and *Ta mère, etc.*, though these stimuli, in each instance, differ only in a very small detail, namely with regard to one character (*br* for *m*, *d* for *m*, *t* for *m*).

Thus the result gained so far is this:

There is, firstly, no *resultant* in the mechan-

ical sense that might play a rôle in the complex stimuli of actions, but the details of the complex stimuli are important as details. Secondly, though details have this specific significance, they possess this significance only according to where they stand in the totality of the stimulus. And what holds of stimuli, holds of reactions, also, as illustrated by a conversation between two friends: The one side consists of "words heard," the other of "words spoken."

To sum up, then, let us say that, in action, stimuli as well as reactions are *wholes* or *individuals*, for the concept of *wholeness* or *individuality*—an indefinable concept, by the way—is just what covers the field here.

The main feature that characterizes the realization of action may now be called the *principle of the individuality of correspondence between cause and effect*.

If, for a moment, we may apply psychological terms for the relation in question, we can say, of course, that in action the stimuli are understood and the reactions have a "meaning"; that an English, German and French phrase may have

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the same "meaning" for a person who "knows" these languages, and that *meanings* are the things "corresponding" with one another.

We now have everything we want: Action is a natural phenomenon that rests upon an historical basis acquired by chance and dissolvable into elements which may be newly combined, and that shows the characteristics of an individual correspondence to individual stimuli. Action, then, cannot be dissolved mechanically, i.e., it is not a mere *sum* or a mere *resultant*. It is, firstly, not true that the singularities of the stimuli are related to the singularities of the effect, and it is not true, secondly, that the stimulus acts as a mechanical resultant. These are the characteristics of mechanical becoming. Acting, therefore, regarded as a *natural* phenomenon, is not mechanical. The correct theory of action, therefore, strengthens the vitalistic theory of life, indeed, it is itself a chapter of this story.

We have only given a short account here of the theory of acting. The reader may refer to my broader discussion in the *Gifford Lectures*, or *Leib und Seele*, if he wishes to know more about details.

Let me finally say a few words on the problem of *instinct*.

Might it not be that we could find a proof of the *autonomy of life* and, therefore, of the impossibility of psychomechanical parallelism here also? This certainly might be the outcome, but instincts, at the present day, have unfortunately not been analysed so carefully as to permit real proof.

Instinctive reactions are complex motions which do *not* rest upon an "historical basis" acquired by the individual. This is the main feature which distinguishes them from *action*. Instinctive reactions are perfect from the very beginning; they cannot be "improved" at least with regard to their specificity, though they may be, perhaps, with regard to the velocity with which they are performed. These brief remarks on instincts are written only to avoid misunderstanding.

In this chapter we have, for the first definitely refuted the accepted idea of parallelism, by showing that a thing which is a necessary consequence of this hypothesis is not true. Action ought to be mechanical according to parallel-

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ism; but it is not. Therefore parallelism is untrue. It might be asked, then: What is "true"? However, we are not concerned with this question at this point. We have first to attack parallelism once more, from a different angle. Only after this has been done shall we proceed to positive statements.

v. *The physical and the psychical compared.*

In this section we shall not study a *consequence* of parallelism, but shall analyse what may be called "the matter itself," in order to find whether parallelism is right or not.

What, then, is "the matter itself"? It concerns, it seems to me, the question what "the physical" and "the psychical" are in their very essence. These two "essences," it seems, ought to be comparable in their most intimate structure, in order that ordinary parallelism should be possible—though even then it might not yet be true. Let us see on this ground whether we are not able to exclude the "possibility" of the theory in question.

By *essence of the physical* we mean the most

essential characteristics of the ultimate type of inorganic being and becoming. By *essence of the psychical* we mean the most essential characteristics in this realm. But what shall we take as *the psychical*? The unconscious, or the conscious, or both?

Now there cannot be any doubt that in the sense of the theory of ordinary psychomechanical parallelism, the concept of "the psychical" must exclusively be taken as meaning "the conscious." This is the "object" that comes at once under discussion; to "the conscious" alone does the usual theory of parallelism refer. For there are many parallelists who deny altogether the existence of the "unconscious psychical."

The psychical, then, in the sense of *the conscious*, is one of the objects of our analysis. This object, of course, must be analysed *as it is*, and not as it ought to be according to the wishes of certain parallelists. This seems self-evident. But it must be mentioned because, strange but true, there have been parallelists who do not regard the conscious *as it is*, with respect to the elements found in its sphere, but who construct a

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psychical world hypothetically, which world then meets very well the parallelistic requirements without regard for the facts.

(1). *The general structural type in the physical and the psychical.*

The general structure of the physical differs in a most fundamental way from the structure of the psychical. Everything that belongs to nature is *near to* some other thing in space, the relation *near to*, in fact, being the most fundamental physical relation. The psychical, i.e., conscious objects, are, on the other hand, *centralized*. They are all related to one "point," as it were,—the Ego. This difference in general structure is fundamental, and it is scarcely understandable how two communities with such structural difference as described could be "the same" at bottom.

Let us not forget, however, that the word "centralized" describes the structure of the psychical only by analogy, but we have no better word. The fact is that there exists a far greater difference than the one expressed by the words "near" and "centralized," for the latter word

still suggests a certain modality of nearness, and there is no "nearness" at all in the psychical. Language here shows its insufficiency in the face of psychological facts.

(2). *The degree of manifoldness in the physical and the psychical world.*

The word "manifoldness" finds its first application in pure logic. One concept has a higher degree of manifoldness than another concept when more elemental, i.e., more indefinable concepts are necessary to define the first than to define the second. But we may apply the concepts of manifoldness and its degrees to empirical objects as well, i.e., to "somethings" which have a quasi-independent being and becoming. A lion, for instance, has a higher degree of manifoldness than a homogeneous sphere of iron.

Let us now apply the concept "degree of manifoldness" to the physical and the psychical worlds, not, however, to all details of these worlds, but to their essence, i.e., to that which makes them "physical" or "psychical."

Modern physics and chemistry tell us that all material bodies are composed of three elemental

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constituents: protons, negative electrons, and ether. This, of course, is true only for a mechanistic view of all nature; if we accept vitalism, as we are, in my opinion, forced to do, other elementalities enter the field of nature as far as organic life is concerned. But we stand, *ex hypothesi*, on the ground of mechanism, for we are criticising *psychomechanical* parallelism. There are some physicists who believe that there is only one kind of element in physical nature, namely, the ether, and that the electrons are certain permanent dynamic states of it. But let us *assume* that there are three kinds of elements. For we must not avoid difficulties in our argument against parallelism; and we undoubtedly make it more difficult for ourselves if we accept three as the number of ultimate constituents in *mechanical nature.

What, now, is the degree of manifoldness in the psychical? Our work is easy here, for we already have all we want, if only we go back to an earlier part of this book, namely, to the theory of materials and, in particular, to the theory of elements (page 12).

We have established six classes of real "elementaries," which are *consciously had*:

- I. Qualities or pure "suchnesses" (red, warm, sweet, white, *re*, etc.)
- II. Space and time data
- III. Pleasure and discomfort accents
- IV. Elemental signs of order or significances (this, not, related, etc.)
- V. Accents of truth (in order, not in order, already known, etc.)
- VI. Accents of the sphere of existence (merely *had*, belonging to phantasy, to reality, to a dream, etc.)

Thus we find not less than six *groups* of elements—probably even more, for I may have overlooked some—in the psychical world, each group containing many species, while in the physical world we find three species at the most.

This, now, is a definite argument against psychomechanical parallelism and really refutes it as a possible theory. If two communities possess not only a very different general structure,

but also a very different degree of manifoldness with regard to the characteristics of which they consist, it is an absurdity to assume that they are bottom *una eademque res, sed duobus modis expressa* (Spinoza), i.e., one and the same thing, expressed in two ways.

But there is still a hiatus in our argument, which the reader perhaps will have noticed. Have we not overlooked something in the realm of mechanical nature? There are three kinds of elements. But is there not an enormous variety of relations among these elements in the sphere of space? The electrons may have the arrangements of a triangle, or of a square, or of a cube; and they move along a circle, or a parabola, etc.

No doubt this is true. It seems, at first glance, to be a serious difficulty for us, but *only* at first glance.

The degree of manifoldness on the physical side is augmented by one rectification. Instead of the degree \mathfrak{S} we now have the degree $\mathfrak{S} + a$, a marking the enormous variety of all possible spatial relations. On the psychical side we had the degree of manifoldness n , and we were sure that n is greater than \mathfrak{S} ($n > \mathfrak{S}$). May it not be

now that n is equal to $3 + a$? This, in fact, would make our whole argument worthless. And yet we can save it. For the enormous variety of spatial relations in nature exists in another form on the psychical side also, in view of the fact that every peculiarity in the realm of that variety may be *consciously possessed*.

Position in a triangle \rightarrow I have "triangle."

Movement in a parabola \rightarrow I have "parabola."

And thus we may add the number a on the psychical side also. But then our formula $n + 3$ takes the form $n + a > 3 + a$. For an inequality remains an inequality, if we add the same integer to both sides.

vi. *Conclusions.*

The theory of psychomechanical parallelism is thus refuted. What is the consequence? Must we accept the theory of so-called psychophysical "interaction," because psychophysical parallelism in its ordinary form is untrue? Oddly enough, no—at least not without great restrictions. And this for the following reasons:

Nature and *mind* are two spheres of empirical existence which are absolutely separated from

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one another and, therefore, are absolutely unable to act upon one another in a causal way. To assume that they were able would be sheer nonsense, at least on the ground of logic, or the theory of order. For the realm of metaphysics it may be different, but we have, so far, not assumed ourselves to be metaphysicians. Logic, then, must formulate what is usually called psychophysical interaction, as follows:

I have my conscious objects in temporal sequence. I establish the theoretical concept *my soul*, which means a quasi-independent object, the dynamic working of which results in certain states which themselves *have*, as their "parallels," "my conscious havings." This is a sort of parallelism between "my conscious havings" and certain states of my (unconscious) soul.

Now my body is among my empirical quasi-independent objects, as far as they belong to Nature. Like all organic bodies it is governed by a non-mechanical agent, entelechy. I am allowed here to speak of the entelechy of my body.

Now there is, firstly, "interaction" between the "entelechy" *and* the matter of my body, and vice versa. This interaction occurs in the realm

of nature, for "entelechy" is a factor *in nature*. But, secondly, the *working* of the "entelechy" of my body is "parallel" to the *working* of "my soul," certain *states* of which were parallel to "my conscious havings."

Thus we have before us *interaction* in the purely natural sphere, i.e., between entelechy and the matter of my body; and three "parallels," namely, the working of my "entelechy," the working of *my soul* and, as far as certain states of the soul are concerned, "*my conscious havings*."

This sounds very artificial, but logic is a very artificial instrument, so to speak. Metaphysically we shall find later on that *my soul* and my "entelechy" are One in the sphere of the Absolute. Then, and then only, may we speak of "psychophysical interaction," understanding, of course, the words "physical" and "psychical" not in that sense which they have in the field of *appearance*, but as denoting the metaphysical foundations of both nature and mind. But this can become quite clear only in a later chapter.

For the sake of simplicity, then let us now speak of psychophysical interaction or of the

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interaction between body and mind, though, as we know, this is not quite correct in the realm of logic.

We know that the brain is the point where matter and mind come together; and they do it in a *causal*, not in a mere functional way, as we have proved. There is, then, a causal element in sensation as well as in the action of will. All we have said previously about these phenomena becomes more definite now, and at the same time, final, though still always in the sphere of a quasi-independence. For we are still logicians, and not yet metaphysicians.

The brain is a preformed system of almost innumerable *possible* connections. The mind uses this system, establishing *real* connections according to its unifying principles. The brain + soul = entelechy, *like* a great telephone station + its personnel.

To explain how this may be conceived is one of the objects of general vitalism. I have tried to analyse this problem in my *Philosophy of the Organism*.⁵ Suffice it to say that we cannot see or touch "entelechy."

⁵ 2nd German ed., 1921, pp. 416-94.

C. Appendix: A Few Notes on Insanity

A few words may be said here about the nature of so-called mental disease or *insanity*.

Is it the "soul" that is ill, or the brain? While we cannot decide this question directly, we can discuss the two possibilities that are present, especially that one which, I think, we must advocate, namely, that there is an "illness" of the brain, and not of the soul.

On this basis, then, we might say: An insane person is "insane" on account of the wrong data which he gets in the course of his conscious life. These data owe their existence to a disturbance of the physiology of the brain. We have said on a former occasion (page 97) that, whatever psychophysical theory with respect to the brain one may accept, there is in any case a univocally determined relation between some ultimate material state of the brain and a conscious content of the form of an image. This is the psychophysical postulate. On the basis of the fact expressed in this postulate it is now possible that in the brain itself, without irritation of the sense organs, conditions may arise which are such that they determine in an univocal way specific con-

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scious images. Hallucinations probably belong here, and so do the wrong data⁶ which are the foundation of all insanity. These data are wrong, of course, only in case they are taken to be what they are not, namely, a *something* that indicates an empirical object. They are not "wrong" in themselves. But the insane person takes them for indexes of empirical reality.

We must make a rather important distinction at this point. As long as a person who suffers from hallucinations or even so-called "forced ideas" knows that they are what we have just called them, he is not called "insane" in the deeper sense, though his psychical life is far from being "normal." But he is really insane as soon as he unhesitatingly takes the data as indexes of real objects, that is to say, as soon as he is the captive or prisoner of the data, as it were.

But does this fact not overthrow the whole theory of the importance of data for mental

⁶ In my vitalism I have also introduced the concept of a wrong datum, namely in cases of superregeneration and the like. See *Philosophie der Organischen*, 2nd edit., 1921, pp. 441 and 484.

disease? Does it not seem as if the faculty of *judging* were disturbed? And is not this faculty something in the soul that is quite independent of the brain? Thus, then, it would seem as if the soul might be sick in spite of all. And yet I do not believe that we are forced to accept this hypothesis. On the one hand the level of the faculty of judgment depends on education and exercise; on the other hand there are also innate differences with regard to this faculty. Both facts may explain, in many cases, what at first glance appears as a disease of the soul; a good deal of "mental" illness would then be the consequence of a wrong interpretation of data on account of a weak faculty of judging, which is either innate or due to want of exercise.

While this hypothesis of course does not fully explain all, it may, nevertheless, show the way to an explanation.

There exists one great difficulty in the interpretation of mental diseases, as well as in the interpretation of the mental consequences of lesions of the brain, and this is the possibility that the conscious life of a person may perhaps be very different from his faculty to express it.

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Even if we assume that we possess an innate idea of the *you* as previously explained (page 109), and that there is an innate faculty of correspondence between forms and rhythms in different fields of becoming (page 110), we must in most cases *infer* the particulars of the conscious states of another person by mere analogy. This means that we must interpret his movements, including his speaking, in the widest sense of the word. For his movements are the only thing that is really given to us. The other person now may not, however, be able to express his conscious life and we, therefore, may call him "mad" while he is not.

The same is true with regard to consequences of lesions of the brain, either by an accident or in the way of experiment. Aphasia and so-called mind-blindness have been much discussed in our day. The results have been very ambiguous: there may be aphasia without any discoverable lesion of the "language center," there may be lesion of that center without aphasia, and there is often both aphasia and lesion with no correspondence between the two, at least as to degree.

1

D. *Final Remarks on the Mind-and-Body Problem*

This now brings us to some concluding general remarks with regard to the problem of mind and body. Let us enumerate what happens psychophysically in a process which begins with a perception and ends in an action. There are, say, electromagnetic waves in a particular combination; the retina is affected, so is the optic nerve and a specific part of the brain; this affects "entelechy" and its parallel, the soul; *then I see an object*. Feelings and thoughts now arise, governed by "determining tendencies," then a particular "willing" comes in, marking a particular state of the soul and its parallel, "entelechy." "Entelechy" affects motor brain parts, this affection is followed by the stimulation of a motor nerve and the whole process ends in the contraction of certain muscles.

What, now, about that part of the process which begins with "I see" and ends with the origin of willing? This part may be called the *intrapyschical series*. It is *not* possible, according to our theory, that the brain plays the fundamental

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part in this process. But the brain may play a secondary rôle,—a rôle with regard to particulars. Here is the point where we are absolutely ignorant. Certainly the brain is not even the last basis of the mere fact of reproduction; for, as we have learned, reproduction is not *re*-production, but production, and we are not allowed to speak of real engrammata (page 124) in the brain. And it is still more impossible to assume that the brain *qua* material brain is the last point in the sequence of psychical events, which, as we know, is directed towards order and wholeness. And yet it might be possible that certain prerequisites with regard to the particulars of production are given in material cerebral states or conditions. In this case the brain would not merely be a system of connections, but more. But “more” in what sense? This we cannot even imagine hypothetically. The “wrong data” which underlie madness would in our opinion, of course, also be due to this unknown cerebral peculiarity.

Bergson, as far as I understand him, does not assume that the brain is more than a system of connections, and calls it an organ of “attitude.” I recommend most intensively the thorough study

of his *Matière et Memoire*, one of the profoundest, if not the profoundest, book of modern psychology.

In the field of the mind-body theory and the mind-brain theory in particular the new psychology differs most fundamentally from earlier theories, as you have seen, I trust, from our long discussion. And this difference does not only relate to the breaking down of psychomechanical parallelism. Without any particular regard to the question, whether parallelism is true or not, the older psychology used to go back to the brain for an explanation of most features in the sequence of psychical phenomena if not of all. The importance of the brain for psychical life in general can hardly be underestimated, but as to the *particular* rôle that the brain plays in relation to *particular* psychical phenomena, we know absolutely nothing with certainty.

The *soul*, therefore, though not very "modern" for a long time, has again come to occupy its rightful place, and there are even some psychologists, such as E. Becher, who have broken away almost completely from the engrammata theory as far as the brain is concerned, and who

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do not hesitate to speak of engrammata of and in the soul, as Benecke had already done some hundred years before.

We ourselves are partisans of this theory. But on the other hand we lay stress upon the point that the brain must in no case become superfluous in any psychophysical theory, and that it might be somewhat more than merely a system of connections. Yet we do not know just what rôle it plays, and are able only to say that that rôle goes beyond the connecting function of the brain, and is certainly not of a primary but only of a secondary importance as far as the very essence of psychical phenomena is in question.

We, of course, mean here by the word "brain" the material brain, the brain as far as it is physicochemically characterized at any moment of its existence. We do *not* mean the brain as governed by entelechy, not brain + entelechy. The brain, then, *qua* material system is not responsible for the essence of the psychical, though it may be responsible for certain particulars in its sphere. The brain + entelechy, on the other hand, or the brain *qua* "physiological or vital

system" is, of course, responsible for psychical essence, for *entelechy* is "parallel" to *soul*.

So much or, rather, so little on the subject of mind and brain. We shall now leave psychophysics, at least insofar as it has been our special subject, although we shall still have to say a good deal about the organization of mind or soul. But it seems to me that, before we do this, it would be wise to put the whole discussion on a higher plane. On a former occasion (page 105) we introduced the concept of the "other" Ego, in order to be a little more free in our discussion. The "other" Ego, we know, still remained in the realm of a mere *quasi*-existence, just as "my soul" did. For we did not leave the field of the theory of order, i.e., the realm of the *I have something consciously*.

We shall now, however, take a more decisive step. We shall give up the "quasi," the "as if" of the theory of order. We shall place the whole discussion upon a *metaphysical* plane. But do not assume that our metaphysics will be in a phantastic or mystical sphere.

III

THE METAPHYSICS OF MIND

THE foundation of metaphysics concerns the meaning of the term *real*, i.e., the term, being or existing *in itself* and not only "for myself" in the sense of a *something* that is *consciously had*. *Esse*, then, in the sphere of reality would be more than a mere *percipi* or *concupi*.

We cannot prove, now, that reality "exists." We can only say that according to our intuition the word "real" *has* a meaning, just as much as the words "relation" and "so many." We "see" that there will be more of order, if the theory of order will only give way and become more than a mere theory of "order." For reasons of order, then, the theory of order gives way and becomes the theory of reality, or metaphysics.

Metaphysics being established, the totality of what is generally called experience in the broadest sense of the word, i.e., the totality of what is consciously and immediately had or what is meant as a quasi-independent object, becomes the appearance of reality.

It is not, however, the task of this book to show in detail how metaphysics is possible and what methods it may apply.¹ It has to do, first, with the world of empirical objects. These objects are not real in the form of their appearance; but the various forms of appearance are signs or marks of so many various sides of reality. A good deal may thus be made out about the metaphysical significance of space, matter, time and causality. The problem of wholeness, personal and suprapersonal, enters the scene, and so does the famous problem of freedom. About this problem we shall have something to say at the end of the book.

What, however, does interest us here in particular is the metaphysical meaning of "the psychological," i.e., of the *I have consciously* or *I know*, at least primarily.

Space and everything spatial is "appearance" of a certain system of relations in the Absolute, unknowable to us "as such," and knowable only with regard to the manifoldness of its particulars. So it is, also, with matter, time, causality, and wholeness.

¹ See my *Wirklichkeitslehre*, 2nd edit., 1922.

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Is now *knowing*, or rather the *I know*, also "appearance"?

Knowing is the kind of relation that makes all particular knowledge, including all philosophy, possible. It is a unique kind of relation, for it does not connect *objects* with one another, but *the subjective with objectivity as a whole*. In this sense, as we know, the *I have something consciously* is for us at the bottom of all.

It now seems to us that it would be meaningless to say that a something "appears" to the Ego in the form of knowing. On the contrary, as soon as the concept of Reality or the Absolute has been established, *knowing* becomes part of it at once. Reject the concept of Reality, or admit that the *I have something consciously* is part of it, and this is the only alternative left.

In the form of the basic fact, *I have something*, part of Reality knows *itself as it is* and the *rest* in the form of *appearance*. Thus "knowing" becomes a *quale* of the Absolute, the only *quale* of it which we know, *as it is*, immediately.

Knowing is now also given to us indirectly, in the realm of appearance. There are other men, and animals, and vital entelechies, all of which

behave *as if they knew*, and it even seems as if I had an innate knowledge about "you-ness" or "otherness" with regard to subjectivity in general (page 111).

Thus Reality contains many subject-points, so to speak, which *know* in various forms, one of which, the *Ego-knowing*, I know immediately. Of the other forms a certain part is fully understandable to me, namely, the knowing of other men. Another form I understand only in part, for example, the knowing of a dog or a horse. The rest, namely, instinctive knowing and intellectual knowing, I can hardly understand at all.

But one very important point must still be emphasized in this brief exposition: Subjects and objectivity are parts of *One*, namely of *Reality*. It is not a case of Reality "*and something else*," the subject. This would be nonsense. There is the One Reality, and it is such as to contain, as its most fundamental relation, *knowing*. Inside the sphere of Reality *and* knowing the particulars of known contents must be acquired by way of sensation, that is, in a causal way. This, at least, is true for my knowing, for "Ego-knowing." But it seems that there are other

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kinds of subjects, which do not need experience in order to know about particulars. It is these kinds of knowing subjects which we are unable to understand in full.

IV

THE ORGANIZATION OF MIND

WE now come to the final chapters of this book. These chapters will, on the one hand, be a sort of summary of everything studied before, though on a higher plane, and, on the other hand, will bring into the discussion many materials that have so far not been taken into consideration.

Our psychology did not start from empirical facts, but from the primordial fact, *I have something consciously*. The concepts of my body, of sense organs, nerves and brain, of psychophysics, of the soul, "my own" and "others," were introduced step by step, since this was necessary in the interests of *order*. For psychology was to us a part of the general theory of order or logic, namely, with regard to the sequence of *my conscious somethings* in time, and only ultimately was the metaphysical point of view introduced to replace the merely logical one.

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1. CRITICAL REMARKS

A. Brentano and Husserl

In the first place I should like to compare my own conception of psychology with that of some modern authors, especially Brentano and Husserl, both of whom are men of great influence.

Brentano has introduced into modern psychology a well known concept from medieval philosophy, but has almost forgotten, further on, the concept of the *intentional act* or, in brief, the "act."

Brentano and his followers tell us that every psychical or conscious "thing" consists of four parts: the I, the act, the content and the object. They further tell us that the act may have different forms, such as thinking, assuming, willing, etc.

To this we make answer:

Firstly, that in our opinion the distinction between content and object only holds when the object is of an empirical sort, belonging either to nature or soul in this quasi-independence, i.e., provided it is a *mediate* object which is meant by an immediate one, to apply our own terminology. But with regard to immediate objects,

contents and object are the same. I do not mean " $\sqrt{2}$ " by something else, but I *have* the significances $\sqrt{2}$, triangle, etc., quite immediately.

Secondly, we do not believe that there are various forms of "act," but that "having consciously" is the only form of act, and that all varieties of psychical things are varieties in the sphere of objects in the immediate sense, the objects having in one case one kind of *accent*, in another case another kind (page 28). This is in opposition to both Brentano and Husserl, the greatest of Brentano's disciples.

But now I must bring out something in opposition to Husserl alone. Husserl does not assume, as does Brentano, that all psychical phenomena are "act" phenomena, but he admits psychical phenomena without "intention," as, e.g., sensation, i.e., he admits that these phenomena are merely *erlebt*. I reply that these phenomena are also, no doubt, *consciously had*, and that to this extent they are act-phenomena, because *having consciously* is the act. For *consciously having* is always a *having of significances*, however dim and little analysed it may be; and for this reason *consciously having* is always "intentionally"

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having, even when it is not a *meaning* of empirical objects, but a mere *having* of contents (or immediate objects). This has been the very basis of our "modern psychology," a basis which may also be expressed by the statement that to be conscious is the same as "to *have* consciously with intention," or "to *have* significances."

There is, however, no special "region" of significance in the Platonic sense. Psychical or conscious phenomena *are* phenomena that are themselves invested with significance, and there "is" no significance except insofar as it "exists" as part of a psychical or conscious possession. Only in an artificial way may we abstract from conscious existence and study significances as such, as we do in mathematics; but we must never forget that we are in this case proceeding artificially. So much, by the way, against all neo-Platonism.

We ourselves, to come back to the point, have never used in our system the words "act" or "intention," because, as we have stated, in our opinion there is only one species of the genus *act*, namely, *having*, in the sense defined, and for

this reason the name of the species may serve as the name of the genus too.

It must be emphasized that Husserl says, most markedly, that he does not intend to advocate any sort of conscious "activity" in using the word "act." In this respect I fully agree with Husserl. There is, in fact, no conscious doing or making. But I think that just for this reason we ought to avoid the word "act" completely, as it too easily suggests "activity."

Brentano is not very keen in regard to the question whether there is conscious activity or not. He shares this deficiency with all philosophers and psychologists of former times, except Geulinck.

B. *On So-Called "Understanding" Psychology*

Another sort of polemics must follow the first.

We have spoken of the problem whether there is an original knowledge about the "you," or the "other ego." We also spoke about our "understanding" of other psychical life (page 161), saying that we may have this understanding either in full, or in part, or not at all—the first

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being possible with regard to other human beings only.

Now there have been some authors, and among them Dilthey and Jaspers as their leaders, who have spoken of two sorts of psychology, namely of an *understanding* and of an *explaining* psychology, and who have told us that these two varieties stand side by side and are of equal scientific value.

I cannot agree with this statement. "Understanding" psychology, is, in my opinion, not itself a scientific psychology, but only a preparation for this. It collects materials for scientific psychology, under the assumption that we may speak of "other" psychical life at all, but it does nothing more. But the collecting of materials and the "explaining" of them, i.e., the bringing of them into a scheme of order, never stand side by side as equivalents.

If I "understand" another Ego's knowing, this only means to me that there is nothing which is new in principle, but merely another *case* of the same *class*. This may be a great simplification, no doubt. But simplification and explanation are not the same.

2. THE SOUL

We now take up again the analysis of the organization of the soul in full. In doing this we may now speak of many souls, and not alone of my own soul (page 114), and we may now also speak of *knowing* as a characteristic of reality (page 160).

The soul of human beings is a non-spatial and non-extended being, and yet it is manifold in itself. Let us call it an *intensive manifoldness*. As we are able to analyse only extensive or spatial manifoldnesses in ultimate detail, we see at once that our knowledge of mental manifoldness must remain very fragmentary.

The soul is in the main an *unconscious* being; only part of it is conscious in the form of the "I have something." But the word "unconscious" is intended only to express the meaning that the soul in full is not the Ego which I know, or, rather, which knows itself. It may be that the soul in full has the Ego-form also. But this would mean that the soul would be an *alter Ego* with regard to the *I-Ego* and would not be quite understandable to the latter, for it would have to be regarded as doing and not alone as *having*

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(which is the characteristic of the I-Ego). The soul-Ego therefore would be an *alter Ego* in not quite the same sense in which so-called dissociated Egos, belonging to one soul and one body, are *alter Egos* with regard to one another. For the soul-Ego and the I-Ego would represent two *species* of "Ego-ness."

The soul is dynamic. It "does" something. It works. We may say, somewhat loosely, that the words "thinking" and "willing," with reference to the soul, now take on their usual meaning. This meaning does not stand in its right place, however, when applied to the Ego, for it is the most fundamental and the most certain result of all mental analysis that the Ego in the form of the I-Ego only *has* or possesses, but does not "do."

The willing, feeling and thinking soul, then, is a theoretical constructive hypothetical concept, meaning a *dynamic something*, just as the concepts "chemical affinity" or "potential energy" mean something dynamic. But we need that concept; for we wish *order*, which afterwards we interpret metaphysically.

The dynamic soul is always working as a

whole. Its non-spatial organization is one whole; and another whole is formed by all materials acquired in life and preserved by the faculty of memory. The second wholeness depends on the first: the materials are inserted at specific "localities," as it were, of the (non-spatial) innate whole organization.

All dynamic concepts applied by ordinary experimental psychology, such as association, "determining tendency," etc., are only of a preliminary kind and must never overshadow the basic wholeness.

Specific mental wholeness of a mental subject is the foundation of his so-called *character*.

Those authors who apply the concept of "act" or "intention" in a fundamental sense (page 164), used to speak, at the same time, of various kinds of attitudes.¹ There is the intellectual attitude, the moral, the esthetic, and the religious, each of them related to a certain specific "value."

Now we have repeatedly said that the *I* only performs one sort of act, namely, *consciously having*, and that, for this reason, it always has

¹ *Einstellung* in German.

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the same "attitude." But, nevertheless, there is a certain truth in the doctrine of a variety of attitudes, if only this concept be applied not to the Ego, but to the Soul.

I have; and *having* is always the same. But my soul may be said to be in various attitudes according to whether it works upon one kind of "somethings" or upon another kind. If it devotes itself to mere questions of order in general, it is in the *intellectual* attitude. It takes the *moral* attitude whenever it tries to find out the forms of order in the system of the actions of man, including "my own" actions. It is in the *esthetic* attitude, if it considers sensible singularities with regard to the essence expressed by them. It has a *religious* attitude, when devoted to the consideration of the dualism of reality and its discrepancy with the ideal of a monism of order. And it is an inexplicable fact that moral and religious attitudes of the soul are always accompanied by a strong accent of feeling, consciously possessed by the Ego that corresponds to that soul.

But all attitudes are "attitudes" of the soul and not of the Ego, which *has* only *contents* of

various forms. On the other hand, the variety of so-called attitudes on the part of the soul is by no means exhausted by the words intellectual, moral, esthetic, religious. We may here specify much more in detail and may speak of a mathematical attitude, an attitude towards so-called formal logic, towards problems of the order of nature, etc.

Of course we may also classify attitudes under a different heading, speaking of pure *intuition*, of *wishing*, of *willing*, etc., with reference to one particular given content. But then also we must say that *I have* in every case in the same way, and only with regard to the doing soul may we say that different sides of its inner dynamics are at work in each case.

The dynamics of the soul is threefold. There is firstly the *inner dynamics*, which is the foundation of our inner mental life, i.e., of the so-called stream of consciousness which, however, does not really exist as a "stream" (page 46). Here we have to do with the "intrapsychical" series, mentioned above (page 153). "Determining tendencies" are working in a directing way, limiting forces and associative affinities being at

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their disposal just as material forces are at the disposal of vital entelechy. But the whole-making ordering power of the soul in full is always at the bottom of all. The part played by the brain here is unknown, but does certainly not affect the essentials (page 156).

During the soul's working that part of the soul which we call the I-Ego becomes consciously aware of certain *results* of that working. Feelings, thoughts, images of phantasy, of memory, contents of thoughts stand before the *I*, one after the other. The temporal sequence of these various forms of "ideas" is, of course, that which is immediately given, and the whole dynamics of the soul is, as it were, invented for its explanation.

Secondly, there is the physicopsychical or *centripetal* dynamics of the soul. The body is affected by a physical stimulus; this then affects the parallel duplicity, *entelechy-soul*, and this affection becomes conscious to the "I-Ego" in the form of a *perception*. Perceptions are destined to give notice to the *I* either of states of the body related to it, or of states and conditions of the medium, both, however, in the form

of appearance, which means that there is *something* in reality.

Thirdly, there is the psychicophysical or *centrifugal* dynamics realized in action.

3. THE FACTORS CONCERNED IN THE ACQUISITION OF KNOWLEDGE

Let us, firstly, speak further of *perception* and its elements, sensations, and of certain problems connected with it.

We already know that what we “perceive” are not states of our brain, but, strange to say and yet very generally recognized, things outside, or conditions of our body.

The community of all perceptions may be called the “material” of our empirical knowledge, of our view of the world.

We now possess this knowledge invested with certain forms, or, rather, inserted into certain pre-established forms: space, time and the so-called categories, such as substance and causality and individuality. Here the problem of a so-called “theory of knowledge” arises in the field of psychology, and the most fundamental question within this problem is whether the content

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of our knowledge is a *picture* of reality or merely a *symbolic* expression of it.

In the pure theory of order a theory of *knowledge* has no place, because the concept of "knowledge" in the narrow sense of the term has no place in it, or only perhaps in the form of "quasi-knowledge." For "knowledge" in the *narrow* sense of the word means the possession of a something which exists in itself, or which is alien to the one who possesses it, while the pure theory of order, takes knowing merely in the *general* sense of *I have consciously*, and does not speak of a something which exists in itself and is only touched, as it were, by knowing.

Only if there is the "I" on the one side of reality and the "else," which has a nature or essence *in itself*, on the other side, can there be a real meaning to the question, whether I conceive the "else" "as it is" or in the form of mere symbols.

Psychology, it is true, may already, in the sphere of a mere theory of order, speak of what we have called a *quasi-knowledge* insofar as it considers things and other Egos as something which exists *as if* they were independent. But this

point of view is very artificial and we prefer to discuss in this book² the outlines of a theory of knowledge in its psychological form on metaphysical grounds exclusively.

A real theory of knowledge, then, requires the concept of *absolute being*, of *metaphysical being*, as its foundation. On this basis alone the question whether our knowledge is a picture or merely a symbol has a real meaning.

Kant has formed a very interesting conception of real knowledge: He agrees that the "else" exists, but says that we cannot know it as it is *in itself*. The "else" affects the unconscious mind; this mind then invests the "else" or its effects with certain forms that are virtually innate, namely, quality, time, space, the categories, and then at the end, presents the results in these forms to the mind's conscious part, the Ego.

This conception *may* be true. However, we can never know whether it is or not, for we are unable to "compare" an *in itself* with a *for myself* and, therefore, it *may* be that the forms which stand before our conscious side and are

² A purely psychological theory of knowledge in the sphere of logics is to be found in my *Ordnungslehre*, 2nd edit., 1923, pp. 315 ff.

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regarded as fabrications of the mind by Kant are in fact constituents of the objective side of reality "in itself." In any case this may be true with regard to the categories. Then there would be a sort of immediate basic harmony among the "giving" forms on the objective side of reality and the "receiving" forms on the subjective side.

But even on the foundation of the theory of Kant our view of the world is not a mere fiction; in *any* case it is a *symbolic* expression of reality, though it may not be a true picture of it. For the degree of manifoldness of reality must correspond to the degree of manifoldness of its subjective expression. Otherwise a postulate of logic would be violated.

We possess certain original forms of order, which permit us to establish a system of doctrines independent of empirical experience or at least of the amount of it. Thus we know at once and in an absolutely definite way, for example, that the straight line is the shortest line between two points, that only one parallel is possible to a given line through a given point outside it. These statements are called *a priori*. They are like instinctive knowledge with regard to the

spatial relations of empirical things and motions.

The same is true, though in a somewhat different way, with regard to other principles, such as the principle of causality. You may say that this principle is not quite irreducible, that it may be dissolved into elements. Thus we may say that it is nothing but the concept of *reason* and *consequence* applied to *becoming*. And yet the non-philosophical individual applies the principle of causality in an instinctive way without knowing of its complexity. He knows *a priori* that every event must have a cause, of whatever sort. Even the savage knows this and acts accordingly.

The essential point is, however, that what we call causality in the realm of appearance corresponds to a certain system of relations in the Absolute, the essence in itself of which we cannot know. And so does space with all its relations. We thus know *a priori* or, in psychological terms, "instinctively" much that is at least connected with the relations of Reality, even if we do not know the absolute quality of the latter.

A very important question, now, is whether

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we have other such instinctive knowledge, besides that which relates to space, time and the most general categories. I believe that we have.

Thus we have spoken of an *original you-certainty* on a former occasion (page 108). Also we have an innate knowledge of the boundaries of our body, for each of our sensations of being touched refers to quite a specific locality of the body as a whole. Also in so-called moral feeling we have an instinctive general knowledge of our belonging to a suprapersonal spiritual community. Finally what is called "impulse"³ belongs here, and has been studied in a profound way by McDougall with special reference to man.

We thus seem to possess many innate instinctive "knowledges," at the bottom of all of which there is the original knowing of "somethings," of "objectivity," which is one of the essential constituents of *knowing* itself, and is applied by the lay person in quite an immediate unreflecting way. Even the philosopher, however, though he is forced to destroy this belief in objectivity in its primitive form, is forced to reconstruct it in a critical fashion. For, I believe, there is in fact

³ *Trieb* in German.

not a single philosopher who does not give to the concept of true *Reality* some place in his system, even though it be a remote one.

Thus we have, then, an *a priori* or, in psychological terms, an innate instinctive knowledge about objectivity or "otherness" in general, about other minds, about our body, about a suprapersonal community to which we belong, and about some general spatial and categorical relations of the objective part of reality in the form of appearance.

All this constitutes a community of schemata which are to be filled with special contents by so-called empirical experience in the way of sensations. Sensation does not create consciousness, but occurs innate in the realm of given consciousness with all its essentials, the most fundamental of which is the essential relation *knowing*, or, *I have something*, or *subject-object*.

Why do not we possess more? Why do we need sensation and perception? Why are we not *monads* which, in the sense of Leibniz, represent a complete "universe of the universe" in an original and primordial way?

It is not at all nonsensical to raise this ques-

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tion. For we know that there are other "subject-points" which in fact possess more of innate knowledge than we possess, and, on the other hand, it is almost certain nowadays that man also may occasionally, in the form of clairvoyance, possess more of it than he does "as a rule," the "rule" therefore being not an inevitable law, but only an expression of the average.

The aprioristic schematic knowledge which we possess about objectivity in general, about other minds, our body, spatial and causal general relations, etc., is, of course, not independent of experience *qua* actual conscious knowledge, but is *a priori* present only in a virtual way with regard to consciousness. It becomes actual knowledge whenever any particular experience occurs, and this is in a way which can best be described by the words: "I might have known this before."

The totality of the aprioristic instinctive virtual schemata forms the main part of what we have called the organic action of the unconscious soul. We may suppose hypothetically that all "determining tendencies" and latent directing potencies (page 62) originating during the men-

tal life of an Ego, have their ultimate foundation here. In other words: The original organized constitution of the unconscious mind determines *which* groups of tasks and wishes will be consciously had by an Ego, all details being determined by experience.

A full investigation of all that is "instinctive" in some way in man, is very much needed and will not be found to be a very difficult task after McDougall's work.⁴ Sexual, feeding, "power" instincts and many others belong here.

The mental diversities among men are expressed, as everybody knows, by the diversities of their tasks and wishes. This diversity may in part be due to the contingencies of actual experience, one person having certain experiences in one field, another person, other experiences in another field. But this is not all. There are also original and primordial mental diversities among human individuals. What is the reason? Why is not mind always exactly the same, at least as far as its original, dynamic organization is concerned? Or may we say that, in fact, mind is always the same *qua* mind or soul, and that all

⁴ *Social Psychology*.

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innate diversities in character and talent depend exclusively on the contingencies of the material organization of the body? If this were the case we should come back again to the question as to what rôle the brain *qua* material brain plays in psychology (page 156). But again an answer is impossible.

4. VARIOUS FORMS OF KNOWING

Let me say still a few more words about the ordinary forms of knowing which differ from the form that is given to man.⁵

⁵ We intentionally do not speak, in this book, of the problem of an *evolution* of the mind, either ontogenetic or phylogenetic. For there are many good books on the "psychology of the child," and, on the other hand, the phylogenetic question is still very unsettled. See Krüger, *Entwicklungspsychologie*. See also page 76, where I have stated that we never know whether we have to do with a real embryonic evolution of the mind or merely with the brain's embryology. The acquisition of known contents, of course, is not evolution. Whether the *structure* of mind evolves itself embryologically—that is the question.

The question of a suprapersonal mind will also not be discussed in this book. Let me only say that, though there may be *one* suprapersonal mind embracing all men or even all organisms, there is certainly not a specific supramind that embraces a particular nation or people. What

There is no reason to assume that primitive man has an organization of mind which is essentially different from ours. He merely does not know what criticism and what analysis are, that is all. Even the very thorough book of Levy-Brühl on the *Thinking of Primitive Tribes* has not convinced me that the opposite is true. Primitive man has all the categories, in particular causality, and differs from ourselves insofar as he fills them with content in a very uncritical way. He certainly does not know Mills' laws of induction. But this does not mean that the structure of his mind is *essentially* different from ours. We may even find the "primordial" type of mind among very uneducated people of our own country, in particular with regard to religious ideas. The so-called primordial mind is therefore related to the critical mind, as mythology is to metaphysics. There is the same fundamental structure in both, the same "scheme of

has been called *Volksseele* by certain German authors may all be reduced to conscious or unconscious suggestion or imitation. Whoever accepts a *Volksseele* as a particular *entity* must also accept such an *entity* for a university or even a club!

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order" in our terminology, or the same form, and it is only the filling out of this form with empirical contents that constitutes the difference.

The mind of animals can be studied only by the behavioristic method, and this has been very ably done, especially in America by Jennings, Thorndike, Yerkes, Watson and others. The faculty of memory extends down to the infusoria. Association and "determining tendencies" are certainly at work in dogs, cats, elephants and even the octopus and the starfish. People used to say that animals, though endowed with "intelligence," lacked the faculty of "abstraction." I do not believe that this argument meets the main point; besides, it is rather vague. The main point of difference between human and animal intelligence is, it seems to me, firstly, that animals cannot dissolve and recombine their "historical basis" (page 130) to such an extent as can man. "A sausage and a stick are, as it were, letters of the dog's alphabet," I have said elsewhere. Secondly, that animals never possess *explicitly* the categories or signs of order, though they act according to them implicitly; they know

what a thing is, but they do not *consciously have* the meaning of "thing."

Everything becomes different as soon as we turn to *instinctive* performances, as present for example, in birds, ants, and bees. Their instincts are much richer than ours, which always remain quite general and indefinite.

The difference between an instinctive performance and an action is this: The instinctive performance is perfect in its typical specificity of combination the very first time it occurs, while action may and must be improved as experience proceeds. This implies that there must be quite a particular sort of knowing at the bottom of instinct. The bird must have a sort of image of his nest, the bee of its hive. The older naturalists have well said that animals with instincts "dream" in advance of what they are to perform. Instinctive faculty is like the faculty of an artist, say, a painter; it is not an exceptional, but a generic faculty. Such knowing we do not *understand* at all. And still less do we understand the "knowing" which must underlie in some way the working of vital entelechy in

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embryology or in morphogenetic restitution. Like an instinct, entelechy works without subsequent improvement, perfectly from the very beginning. To instinct therefore, not to intelligence, it must be compared. But both are forms of knowing.

5. THE DYNAMICS OF WILL

We have stated that the dynamics of the soul is threefold (page 173), that it consists of an inner, a centripetal dynamics and a centrifugal part. The inner dynamics we have discussed at length in previous chapters; some important topics which relate to centripetal dynamics were analysed in the chapter on psychophysics and in the paragraph just above. For everything that has to do with the acquisition of knowledge and with various forms of innate knowledge, belongs here. We now have to add a few words on *centrifugal* dynamics, completing what has already been said about will.⁶ For with the *consciously*

⁶ Only outer or "centrifugal" will (page 175), of course, is the subject of discussion here, the dynamics of inner or "centripetal" will belonging to the inner dynamics of mental life exclusively.

having of a will content, specific centrifugal dynamics sets in.

Let us assume, in the first place, that, for example, I have the *will* to write a letter, but that I do not have the *will* to contract certain muscles of my fingers. Nay, I do not even have the *will* to take my pen, though my hand takes it. This tells us that the conscious side of all willing is extremely limited; it relates to some final state exclusively, at least in most cases, all intermediate states necessary for the accomplishment of the former being reached "automatically." And this means that conscious willing is an index of a certain state of the mind which, on its part, makes effective a certain dynamics that remains almost entirely in the unconscious sphere. *I* will a certain end, and *my soul* knows what is to be done in order to reach it.

My conscious willing may originate in immediate correspondence to a perception, as in the case of my seeing a friend at some distance and having the will to meet him. But it also may originate in what is generally called the "spon-

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taneous" way, that is to say, in the course of the dynamics of my inner mental life.

All this will prove to be of importance with regard to certain psychological phenomena which will be discussed very soon.

In certain cases there exists a certain conflict as to what is to be "willed," the so-called conflict of motives. And it is here that the competition of various feelings which has been mentioned above⁷ sets in, the one feeling possessing the stronger accent of pleasure, the other the stronger accent of finality ("depth" or "weight" according to Krüger). One of the two feelings will be victorious and will thus determine *the* will proper, and therefore action. We shall come back to this problem again, when discussing *freedom*.

6. ON CERTAIN MODIFICATIONS OF MENTAL LIFE

A. Terminology

We return to the general analysis of the organization of the *human* mind or soul, a topic which is by no means finished.

Let us, in the first place, introduce a few

⁷ p.35.

technical terms which will prove to be of great importance for all that is to follow, and make the discussion much more simple and easy.

By the term *simple memory*, or memory without a temporal accent, I shall understand the faculty of remembering any part of past experience merely with regard to its quality, but without reference to the particular connection in which it has stood in the totality of experience, and, therefore, without a specific time accent.

By the term *specified memory*, or memory with a temporal accent, I shall mean the faculty of remembering any part of the past experience with particular reference to its "date," i.e., the particular temporal and other relations in which it has stood.

The faculty of speaking a foreign language, then, belongs to the phenomena of simple memory, while to remember what I said a week ago at noon belongs to specified memory.

B. *The Meaning of the Word "Unconscious"*
Still another introductory remark will prove to be of importance.

By the word "unconscious" we have already

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denoted a *something* which, though belonging to the psychical sphere and not being physical, is yet not a *something* which "I have" or "have had." We now simply add that "unconscious" is to mean the same both as not being conscious and as not having been conscious. This seems self-evident and quite superfluous. But, strange to say, it is not. For there are certain authors who speak of "unconscious ideas," i.e., of "unconscious conscious contents," terms that are sheer nonsense, and there are others who speak of "unnoticed ideas," which is also sheer nonsense, though perhaps not so apparent, for this also means and can only mean an idea which is not and has not been a conscious idea. Everything that is "not noticed," therefore, is not or has not been conscious, and is, therefore, *nothing* in the realm of conscious contents.

In this connection we at once raise another question in order to settle it for all time.

Can I "remember" something which I have never *consciously* possessed, not even in the dimmest way, though I *might* have possessed it in so far as the stimulus in question has affected, for example, my ear or my eye? Or is this im-

possible, and must every case in which this phenomenon seems to have occurred be related to a real past conscious possession which has been merely forgotten very quickly and definitely? Or, to state the problem in more concrete terms: I am walking along the street in order to go into a certain shop, but I am talking with a friend, and am inattentive to the matter of the shop. Suddenly I notice that I have already passed my objective. What has happened? Did I really not "see" the name in question and yet "remember" to have seen it? Or did I see but at once forget? The truth is, unfortunately, that we do not know. But in any case if I have not seen, then I have *not* "seen," and to speak of an "unconscious having seen" remains a *contradictio in adjecto*.

Now that our preparatory work has been done, we may proceed with our discussion as to the mind's organization.

C. Classification and Description

The mind or soul may, firstly, pass through consecutive or, rather, alternative states which are very different in structure with regard to the

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conscious part, and there may be, secondly, certain states of the mind which are separated into two or more strata, as it were, each endowed with an Ego, the strata being in causal interaction with one another. Thirdly, there is the phenomenon of two alternating Egos of the same general structure, but with different contents; and, finally, there is the splitting off of certain fragments of the mind that are not endowed with an Ego, but that affect the one Ego which exists as a whole.

i. *Dreams.*

The first of these implies the phenomenon of *dream* in its alternation with waking, on the one hand, and the phenomenon of the hypnotic state, in its alternation with the normal state, on the other hand. The second phenomenon is generally described by the words *consciousness* and *subconsciousness*. The third is called *dissociation* of personality; it is mostly combined with the phenomenon of subconsciousness. The fourth is the phenomenon of the co-called *complexes* of Freud.

All these phenomena may be combined in some way. They do not interest us with regard to their

specific peculiarities, but only with regard to what they reveal as to the essence of the soul.

Let us, then, first consider the chief characteristics of *dreams* in relation to our discoveries in the field of the normal psychology of waking conscious life. There is no doubt that dreams are sequences of *somethings* which are *consciously had*. And the Ego of "my" dreams is the same as the Ego of my waking, for I may remember "my" dreams, and while dreaming I remember a good deal of my experiences in the waking state. Thus it seems as if with regard to the Ego-relation and memory there were only slight differences between dreaming and waking; and yet these are rather important differences, as is shown, if we go into details.

With regard to *remembering*, there seem, however, to be more important differences. Thus in the waking stage I remember, or at least may remember, the contents of my dreams in the form of *specified* memory, while in dreams only *simple* memory, i.e., memory without a temporal accent, is at work. This means that, while dreaming, I recognize what a house or a dog is, but without any reference to the real temporal and causal re-

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lations of the past. Simple memory is thus very strong in dreams; for very often things long forgotten appear in them, though without a specified accent of time.

As to *Ego-ness* it is true that the waking and the dreaming Ego are the same *qua* Egos, and yet one very strange characteristic of the dream is closely related to the concept of *Ego-ness*: The *somethings* I have in my dreams are, of course, all *my somethings*. But I possess some of them, very often at least, as if another person were telling me about them; for instance, it often happens that I "ask" somebody a question while dreaming, and get an "answer" from him. Let us call this strange form of knowing: *Knowing in the form of alien knowing*, or, more explicitly, *knowing in the form of knowing about another subject's knowledge*. For the situation is this: I know in the form, "as if I knew that another person knows"! This strange form of knowing will prove to be of general importance.

The general structure of dreams in contrast to that of waking psychological life is often described by saying that all directing agents are absent in them, and that pure association oc-

cupies the field exclusively. This is most decidedly wrong. For dreams have significance and meaning and are by no means chaotic, nay, they are sometimes very dramatic.

But there are other features in the structure of dreams which may serve to distinguish them from waking life.

Firstly, there is an enormous prevalence of the *sensible*⁸ in dreams: one picture follows another. This is not the same thing as saying that no abstract elements exist in dreams. Such elements exist, but they are dim and quite overshadowed by the sensible.

Secondly, and this is the most important characteristic, there prevails in dreams what might briefly be called lack of judgment. This feature is related to the lack of specified memory in dreams, but it means more than this. The accents of finality, of "being in order," are absolutely lacking. We have forgotten all our knowledge about laws of nature—and are not at all astonished about it.

What, then, is the *meaning* of dreams? What do they express?

⁸ *Anschaulich*, in German.

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Freud, it seems to me, was right in saying that in very many cases at least dreams are the fulfilment of wishes which cannot be fulfilled while awake. These wishes may belong to the sexual sphere, but not necessarily. Freud and his followers have established a complete table of symbols with regard to this topic, unfortunately almost exclusively for the sexual desires. Freud has also introduced the important concept of *censor*, which means that the obstacles which prevent a wish-fulfilment while awake cause the dream to be symbolic. For all details the reader should go back to the very important works of Freud himself.

Our brief explanation of dreams must suffice here. Other features of dreams are very rare and rather uncertain. The continuation of the same dream on subsequent nights may be mentioned, and it may be added that if this feature were a normal one, we should probably speak of two kinds of *nature*, the "night-nature" and the "day-nature," and should be quite accustomed to "belong" alternately to each of them.

The theory of dreams, then, teaches us that the *I have consciously* exists in two modifica-

tions, alternating according to whether I "sleep" or "am awake." The latter alone shows a continuation of its contents and leads to that concept of empirical reality of which my psychophysical person is a specific member.

ii. *Hypnosis.*

The phenomena of hypnotism, subconsciousness, dissociation and complexes must now be studied together. But we shall lay stress only upon those characteristics that are important for our understanding of the ultimate structure of mind. We shall not study these phenomena in detail with regard to their descriptive and classificatory side, as this part of the matter is quite generally known. A few words only will be devoted to pure description and classification in order to eliminate misunderstanding.

The hypnotic state is not a kind of sleep, for there is sensation, perception and willing during it, though these are limited to a particular field of empirical reality determined in most cases by the hypnotist and by the words spoken by him. The hypnotic state is induced either by suggestion or by auto-suggestion, the first prob-

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ably always being reducible to the second and only acting as an important stimulus. What might be called the *emptiness* of consciousness is the prerequisite of the hypnotic state; even this emptiness may originate either by a "suggestion" of somebody else, which is accepted, as it were, and transformed into autosuggestion, or by autosuggestion directly, i.e., by a release of all willing, either directly or by means of looking at a fixed point or into a crystal or in some other way.

The hypnotic state being established, its most general fundamental characteristics are *hyperesthesia*, the *lack of fatigue* with regard to muscular contraction, and great strength of *simple memory*. All other characteristics of hypnosis depends on particular suggestions or autosuggestions, after original general suggestion or autosuggestion has already established that state.

The most important suggestions and autosuggestions of a particular kind may result in purely psychical or in psychophysical phenomena.

Let me give a short classification :

(1) Physical Phenomena

(i) *Positive hallucinations and illusions*: A flower is seen where there is none (hallucination), a spot on the window is taken for a butterfly, water for wine, potatoes for oysters (illusion).

(ii) *Negative hallucination*: A certain person of a company is neither seen nor heard, though he is present.

(iii) *Imitation*, in a *dramatic* way, of other persons (Napoleon) or younger states of one's own personality (a child), or even an animal.

(iv) "*Knowing in the form of knowing about alien knowing*," (page 196). The hypnotized person, for instance, often knows about the experiences of his normal state as if this normal state were another personality.

(v) *Suggestive or autosuggestive influence* upon all sorts of "fixed ideas," phobias, bad habits, etc.

(vi) *Posthypnotic suggestion*, i.e., the fact that a suggestion during hypnosis, consisting of a command to perform a certain action after being awakened, is carried out exactly at a fixed time, say at 10:30 a.m. next day, provided that

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the action suggested is not too much against the normal "character" of the person in question.

(2) Psychophysical Phenomena

Suggestive influence upon the healing of wounds, on inflammation, digestion, menstruation, etc. Even the healing process in tuberculosis is said to be influenced by suggestion or immediate autosuggestion; and an ordinary "cold" one has caught may be abolished.

As a rule the person in hypnosis, the *H*-person, as we may call him, knows everything about the same person in his normal state, the *N*-person, either normally or in the form mentioned under (1, iv) but not vice versa, if this is not particularly suggested. An *H*-person in a subsequent state of hypnosis knows about his experiences in all former hypnotic states.

The *H*-state therefore is richer in contents than the *N*-state. But the *N*-state is richer in judgment, i.e., richer with regard to the distinction between what is "true" or not true. We may also say that the *H*-state is one of passivity, the *N*-state one of mental activity.

iii. *Dissociation.*

By *dissociation of the personality* we mean the fact, fortunately rather rare, that two or even more Egos belonging to one soul (and one body) alternate with one another as far as their "waking" state is concerned. Dissociation is mostly the effect of a so-called "shock." Let a mentally normal person be called an *A*-person. Then, in a case of dissociation, there is suddenly a *B*-person, of a very different "character," living his own life. *B* in most cases remembers what *A* has experienced, either in an ordinary way or in the form "as if *A* were somebody else." But *B* may also be absolutely excluded from *A*'s experience. *A*, the original state, never knows anything of *B*, when, later on, he has taken charge again. Let us not forget, however, that even if *A* and *B* are absolutely ignorant of one another, yet their "simple memory," with regard to language, to social institutions, etc., is almost always the same.⁹

⁹ There are a few cases in which the *B*-state knows absolutely nothing of *A*'s former life, i.e., does not even possess *A*'s "simple memory." *B*, then, has to learn everything from the beginning, including some language. But such a "psychological baby" learns very quickly.

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There are many variations of the phenomenon of dissociation, but what we have said may suffice, and we have only still to add that the *B*-person—or a *C*-person in other cases—may occasionally influence the action of the *A*-person, to the great astonishment of this person himself.

Freud's "complexes" act in a similar way. They are, however, *not* crowned by an Ego, but are *fragments* of conscious contents, as it were. They influence the actions of a normal waking personality, just as one of the latent personalities in real dissociation may do. So much may be said about these strange phenomena in a merely descriptive and classificatory way. For further details the reader should study the works of Janet, Bizet, Freud, Morton Prince, Baudouin, etc.

You will have noticed that almost the same essentials, such as the influence of one Ego upon another, i.e., occur in several of the phenomena in question, and we shall now try to analyse these essentials in full. In doing so we shall take our material, as it comes, from hypnosis, from dissociation, from the action of complexes, and perhaps also from dreams; and some other phe-

nomena, not yet mentioned, such as automatism, will likewise enter into our discussions.

D. The Causation of Hypnosis and its Essence

The first thing to be discussed is the hypnotic state and its causation as such.

The inauguration of the hypnotic state itself is always, strange to say, marked by an act of *will*, or rather by a sequence of two such acts. The first act consists in willing mental passivity or emptiness, the second in willing attention with regard to a very limited field. This field varies in kind, according to whether suggestion or autosuggestion is in question. In the first case attention is directed towards the hypnotist, in the second to a particular idea originating in the mind itself. This difference remains, even if suggestion is completely reducible to autosuggestion. We are told, by Coué and Baudouin in particular, that there must be no *strength* of willing in autosuggestion; that this would have just the reverse effect with regard to the consequences of autosuggestion which are expected. But, in any case, an act of willing stands at the *beginning*; for "to be mentally empty" and then

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"to be attentive" must be willed, though it may be true that a strong and decided willing, when directed towards the content of an autosuggestion as such, disturbs the autosuggestive effect.

We know that in willing *I* do not "do" anything. The doing is in my mind (page 35). The will directed towards "becoming hypnotic," then, is an index of a certain state in my mind that sets at work some sort of dynamics in it, of which, firstly, the one-sided attention and, secondly, the hypnotic state are the effects.

The hypnotic state itself, then, can only be characterized as a complex of particular faculties or potencies. In other words, we call a person *hypnotic*, if we know that under certain conditions he will behave in a certain manner. We must not forget that the static and dynamic state of the *soul* is the main thing, and that the conscious phenomena which appear are only a fragmentary index of that state.

The chief characteristics of the soul, while in hypnosis, seem to be great strength of simple memory, on the one hand, and great strength of what in the realm of consciousness is called "conviction" on the other hand. But this con-

viction is of the form of a mere belief, of a very strong form however, and lacks sufficient reasons. In other words it is quite isolated and not related to the whole content of former experience. You may say so, or I say so; and therefore "so it is." That is the general schema. You (or, in case of autosuggestion, I) say that there is a wasp, that I *am* Napoleon, a child, a dog. Therefore I am convinced that there "is" a wasp, or that I really "am" Napoleon, etc. And now the content of the conviction gives origin to particular "determining tendencies" and thus controls the actions of the hypnotized person. *The implanting of determining tendencies without logical control, then, characterizes the hypnotic state more than anything else.*

Let us look back upon what we have said about the dynamics of so-called *willing* in general (page 188).

"I will a certain end, and *my soul* knows what is to be done in order to reach that end." And what I will either stands in close relation to a particular perception or originates spontaneously on the foundation of the dynamics of my inner mental life.

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In suggestion, then, or in autosuggestion, the *end* which I will is either determined by an hallucination or an illusion which is wrongly taken for a "perception," or is originated by the so-called spontaneity of inner mental dynamics in a misled way. The first is the case if, e.g., I take a spot for a wasp and try to avoid it, the second, if, e.g., I believe I "am" a child, or a dog. And the being "misled" in the second case consists in my being "convinced" of a something of which there is no reason to be convinced.

But, exactly as in the case of so-called normality, the being convinced and the willing a certain end in consequence of it, starts the unconscious dynamics of the soul. Here also the soul "knows what is to be done" in order to attain the end. Therefore, it is not the general schema of the dynamics of psychical life that is changed in hypnosis, but the conditions which *start* those dynamics. It is for this very reason that hypnotic life runs along very fixed and definite lines, in opposition to dreams. It is in some respects like *one* long dream, but the general medium, in the midst of which it occurs, is not that of "sleeping," but of being partially

awake, though in a "wrong" way. All hallucinations, positive or negative, are the effect of this general characteristic.

This, I believe, is a correct analysis of what is meant by suggestion (or autosuggestion) in the narrower sense. We usually apply the word "suggestion" in two different meanings, it seems to me. First of all there is the "suggestion" or autosuggestion of becoming hypnotized at all. This, as we have stated, is a sort of willing, namely, first, to be mentally empty and, after that, to be attentive only in one particular direction. We may call this *primordial suggestion*. The effect of primordial suggestion being realized, *particular suggestion* sets in. That means that a particular "idea" in the form of an absolute conviction, which starts particular determining tendencies, is implanted.

Hypnosis thus means the limitation of the logical faculties combined with an extension of the mnemonic faculties of mind. And this means a disturbance of the mind's dynamic organization in so far as only a fragment of its dynamics is at work, though in a very perfect way. For the enormous extension of *simple* memory in

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hypnosis must never be forgotten: We know, for instance, that the hypnotized person may remember poems or even foreign languages that have been long forgotten. On the other hand, something is "forgotten," namely, the totality of experience so far as it is ordered. The enormous extension of simple memory in hypnosis allows us to establish the hypothesis that, at the very bottom, the soul is able to retain *everything* that has ever been experienced during the whole mental life, the great limitation of memory in the normal state being due only to secondary obstacles, whose character is at present unknown.

Does the brain play any rôle here at all? We do not know whether it does or not, as is the case also in regard to other problems.

Kohnstaman¹⁰ was of the opinion that in the deepest state of hypnosis the soul not only knows everything that has ever been experienced in the Ego-form, but also never falls into error. According to him the soul is "perfect" in this state, even with regard to morals.

If this is true, we must of course make a distinction between *two hypnotic* states, the one,

¹⁰ *Journal für Psychologie und Neurologie*, 23.

analysed above, being only a transitory state. The transitory state, then, would be perfect with regard to memory, but imperfect with regard to judgment; the waking state would be imperfect in memory, but rather perfect, though not completely so, with regard to judgment; and the "deep" hypnosis would be perfect in every respect. However, more investigations are required here.

E. *Co-consciousness*

We shall now have to deal with two very important concepts of modern psychology: *Co-consciousness* and *subconsciousness*. We analyse so-called *co-consciousness* first. Here we must be rather careful in our terminology, in order not to assume similarities which do not exist.

The term "co-consciousness," in its strict meaning, ought to be given only to the phenomenon of the evident existence of two Egos related to one soul (and body) *at the same time*. Now, being "evident" means nothing more than to be *manifest*. And the question is whether in all cases of so-called co-consciousness there are really two Egos manifesting themselves "at

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the same time." In some instances this seems to be the case.

If a hypnotized person experiences a negative hallucination, i.e., does not see a certain person or a certain card in a deck, he will, when very quietly asked, if he *really* does not see, answer just as quietly, or even write the answer down, that "of course" he sees, but that he is not allowed to see! And in fact, a "somebody" with regard to the person in question, a certain *X*, *must* of course experience what the waking person himself does not, this "somebody" being related to the same soul that the waking person is related to. This "somebody" *makes* the waking person *unseeing* and to this extent is subconscious, as we shall state later. But so far as this "somebody" knows *that* he is seeing and makes "the other" *unseeing*, he is co-conscious.

Let me introduce here two terms: *primary action* and *secondary action*. The hypnotized person in his general behavior during his hypnotic state performs primary actions, the "somebody" present while he is quietly speaking or writing performs secondary actions, *using the same body*. The simultaneous occurrence of

primary actions and secondary actions in the same body is the real criterion of true co-consciousness.

. A subconscious somebody may also, of course, at least in many cases, be called "co"-conscious in a certain sense, as we shall see. We might speak of latent co-consciousness in this case and distinguish it from *actual co-consciousness*, with which alone we have to deal in this section of our book.

The sort of writing manifested in the case of negative hallucinations, and the quiet manner of speaking too, is generally called automatism. Automatism, then, if occurring simultaneously with actions of a "primary" person, is the criterion of actual co-consciousness.

Automatism may also occur in the phenomenon of post-hypnotic suggestion. A person, to whom a post-hypnotic command has been given in hypnosis, may write the command down, when again awake, before the performance. He may write down, for instance, at 9 a.m.: "I shall recite a poem at 12.30 p.m."

Who is the "he" in this case? He is our "somebody," of course, for the person in question as a

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waking Ego does not know anything about "his" writing. A very fine case of actual co-consciousness. It differs from the first one insofar as the "primary" person is here a normal waking person, while in the other case the primary person was himself a hypnotized one.

Automatism may also occur in the phenomenon of dissociation. *B*, as a rule, is subconscious with regard to *A* and may perhaps be called only latently co-conscious. But occasionally *B* performs "secondary" actions during the acting of *A*. And in these moments he shows his actual co-consciousness.


On the automatism of so-called "mediums" we shall speak later.

F. *Subconsciousness*

Before trying to find out the final basis of co-consciousness, let us study the subconscious state. The final analysis of what here is in question will then be the basis of both phenomena.

Firstly, we find subconsciousness during hypnosis. For negative hallucinations can only be understood on the assumption that "something" prevents the hypnotized person from seeing what

it sees. But the "something" is a *somebody*. For he may manifest himself automatically, as we know.

-  In the phenomena of post-hypnotic suggestion a subconscious somebody is also at work. He is a *somebody*, for he also may wish automatically. From this we may infer that he is a "he" also in cases where no automatism occurs. He "signals" to the primary person what to do and at what time.

In the first case, in negative hallucination, a subconscious Ego was related to a hypnotized *alter Ego*; in the second an Ego is subconscious to a normal Ego.

Subconscious phenomena during dissociation are conscious. The abnormal state *B* may be subconscious to *A*, but never vice versa. And, occasionally, a *C* may be subconscious to both.

We may speak of a subconscious "Ego" here, a real *alter Ego*, in fact, for two reasons. There is, firstly, occasional automatism of the *B*-person performing secondary actions during the presence of the *A*-state; and, secondly, automatism of the *B*-state later on, acting as a waking primary personality, in which he knows about what

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he has automatically done while *A* was in the ascendancy.

It seems as if the *B*-state, while latent, knows everything that has happened to *A* during waking in the form of *knowing about another subject's knowing* (page 196). *B*, in fact, regards *A* as another person, much disliked in most cases. And the same is true with regard to a *C* in relation to *B* and *A*, when a third dissociated personality exists.

The complexes of Freud are mere subconscious "somethings"; they are not Egos.

G. *The Essence of Co-consciousness and Subconsciousness*

What do the phenomena of co-consciousness and subconsciousness, including all particulars and especially the knowing in the form of "knowing about another subject's knowledge," tell us about the organization of the soul?

The phenomenon of an extension of memory, so common in hypnosis, is not present in dissociation, the *B*-person or the *C*-person being not at all hypnotic personalities. Co-consciousness and subconsciousness, therefore, are not neces-

sarily connected with that extension, though they may be connected, for a subconscious personality may also be an hypnotic one, as is the case in negative hallucinations, where he may even be called "subhypnotic," *and* in post-hypnotic suggestion.

A subconscious Ego is not the soul in its unconscious totality. Such an Ego is like the normal one with regard to its structure, i.e., it is a rather limited Ego.

But such an Ego is less limited than a thoroughly "normal" Ego, for it knows, when waking, about all the experiences of its companion, though in that complicated form which we may call *dramatic*.

At the first glance it might seem as if we could say that in dissociation *B* sleeps during the presence of *A* and is dreaming of *A*'s experiences. But this would be wrong, for to experience well ordered contents, though in a strange and complicated form, is not to dream.

Of the dreaming of *B* we may only say that if there is a period in which *B* is the primary Ego, just like *A* in other periods, it is really dreaming while sleeping *in* this period.

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A very strange feature, discovered by Morton Prince, is that the *A*- and the *B*-state of a dissociation may be the *same* person when hypnotized. And this hypnotized person, related to both the *A*- and the *B*-state, knows all about the waking life and the dreams of both *A* and *B*, though in the form of knowing about another subject's knowledge. He may be called into waking, and then he is a new personality, *C*, with a "character" different from that of both *A* and *B* and now living his own life. And he keeps all his knowledge about *A* and *B* during this life, always in the strange form mentioned.

H. *Summary*

If we attempt to sum up all we know so far about various *states* of the soul, that is, about all that *may* happen to "me" or to "you," to put it in non-technical language, we are entitled to say that the following modifications of such states exist:

- I The Ego in waking
- II The Ego while dreaming
- III The Ego in hypnosis

- IV The hypnotic Ego as co- or subconscious to I
 - V The subhypnotic Ego as co- or subconscious to III (negative hallucination)
 - VI The Ego as dissociated waking Ego (state *A*) alternating with another dissociated Ego as an *alter Ego*
 - VII The same while sleeping
 - VIII The same while hypnotized
 - IX The abnormal dissociated Ego in waking alternating with VI
 - X The same while dreaming
 - XI The same while hypnotized
 - XII The same as co- or subconscious to VI
 - XIII A third dissociated Ego (state *C*) alternating with VI and IX, and knowing all, including the dreams, of both, as if they were other subjects
 - XIV The same hypnotic stage, which is at the same time the hypnotic stage of VI and IX
 - XV The same as co- or subconscious to VI or IX
- If we call the *primary-Ego* that Ego-modifi-

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cation which is the dominant one during a certain time, we are entitled to say that there certainly is a sequence of various modalities of the primary Ego, the most common of which is the alternative existence of I and II, i.e., of the normal Ego in its waking and sleeping state.

But the states III (hypnotic Ego), VI (dissociated state *A*), VII (the same sleeping), VIII (the same hypnotic), IX (dissociated state *B*), X (the same dreaming) XI (= VIII in Morton Prince's case, i.e., the same hypnotic), XIII (the dissociated state *C*) may also be in alternation with I as main Egos.

The first result, then, is that there is a great variety in the sequence of primary Egos with regard to their modality. This modality must be in some unknown relation to the structure of the soul. It affects quite certainly that part of it which knows itself in the proper *I*-form, immediately known to "me."

Now each modality may at the same time be such that the primary Ego is accompanied by a secondary Ego, for which we also assume the *I*-form, or at least by certain dynamic fragments of contents, the complexes of Freud.

These secondary Egos, or mere complexes, may be real co-Egos, performing secondary actions on the same body, or they may be latent co-Egos, which dynamically affect the main Ego and are called sub-Egos in this case.

The existence of a primary Ego and a secondary Ego at the same time seems to proclaim that the organization of the soul is, in some unknown way, split up into parts or sections, each of them ruling over only a part of the whole storehouse of memory contents. For the memories of the primary Ego and the secondary Ego are certainly separated insofar as the primary Ego is limited, while the secondary Ego may either be limited or be in full possession of memory. There is, then, at least one "fragment" as to memory, or even two. And even if there is only one fragment, namely, the primary Ego, the secondary Ego which is in full possession of memory possesses its memory content in that strange form which is known to us as knowledge in the form of knowing about another subject's knowledge, and which we know already from our analysis of dreams.

Every Ego-form except the normal waking

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Ego appears as abnormal, though that Ego-form also is only a fragment with regard to what we call the Ego of the soul, which is unknown to us in its peculiarities, unless it is realized in the "deepest" state of hypnosis as this is described by Kohnstamen (page 210).

The strangest thing of all is the dynamic relation among two coexisting Egos, known as the action of subconsciousness. One of the Egos in this case certainly does not know about the other's existence and contents, and the other, as we have seen, if it knows about the existence and contents of the former at all, knows about it as if a "stranger" were in question.

How is it that there are two spheres of knowing with mutual ignorance or, at least, with one-sided ignorance and one-sided "strangeness" in the same soul, and yet that these spheres may come into causal relations in the second case?

K. *The Rôle of the Brain*

Does the brain play a rôle here? We do not know. But we do know something about other cases in which there are *many* in the place of *one*.

I refer here to my embryological experiments. If one separates the first two or four cleavage cells of an egg of a sea-urchin or starfish, one gets as many fully developed complete organisms as one has separated cells. Now to each of these organisms belongs a soul; and if one does not like to speak of the "soul" of a sea-urchin, one may assume that the experiment has been carried out with the human egg, which is easily imaginable.

Here, then, we have many Egos related to an amount of matter which, if undisturbed, would have given one organism. However, the conditions here are not quite the same as in the objects of our present purely psychological discussion, since in the embryological experiment there are as many Egos as there are souls, while in the purely psychological realm there is one soul, but many Egos. In any case, however, the embryological results show us that potential mental one-ness *may* result in actual mental many-ness, according to material circumstances.

This, then, seems to suggest that material circumstances also play a rôle in the psychological phenomena in question, and, if they do,

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we should certainly be compelled to relate them to the brain. Disturbances in the brain would then seem to be the cause of disturbances in the soul's structure, as in ordinary mental disease (page 149). Of course, we cannot be satisfied with generalities of this kind, but we have nothing else at present.

If, however, we do say that the brain may be responsible in some unknown way for hypnosis, subconsciousness, dissociation and the like, we do not mean to say, of course, that these phenomena depend on brain activities in an essential way. All these features remain *phenomena in the soul*. But it may be that soul activities and forces receive certain data from the brain, and that they act "abnormally" if the data exceed certain limits.

Take, for instance, the two most important characteristics: subconscious influence and knowledge in the form of "knowing about another subject's knowledge." These are quite surely phenomena, which have their foundation in the non-spatial organization of the "unconscious" mind. There is one-sided ignorance combined

with one-sided knowledge yet strangeness, and the stranger is affected, in a very hostile way sometimes, by the one who knows him. All this is the case in the conscious field and on the foundation of one mind. What we have called simple memory (page 203) is mostly common to both partners, as exemplified by language.

Why is *A* not able to get in touch with the particular contents of *B*, while *B* gets in touch with the contents of *A*, but in that strange "dramatic" form to which we have reference? Functional disturbances of the brain *might* give us the explanation here, just as material disturbances may serve to explain superregeneration in spite of all vitalism.¹¹

The theoretical conditions are similar to those which we have encountered above: Memory is certainly not a "faculty" of the brain, but since it is not absolutely perfect in its working, we are obliged to refer to something material for its defects. Ordinary madness requires the same "explanation," for *the soul* cannot be sick, it seems. And now abnormalities or even mere modi-

¹¹ See p. 148.

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fications of "Ego-ness" lead us to the same result, because we are not able to conceive how the soul might modify "Ego-ness" by itself.

But once more it must be stated that reference to the brain, even if we went much more into detail than, unfortunately, we are able to do, would not at all mean that dissociation, hypnosis, dream, co- and subconsciousness have not their essential reason in faculties of the brain with regard to its "organization." We might even conceive all these phenomena under the heading of regulation, so important in biology. The soul, then, would receive data from the brain and would make the best of it.

L. *Logical Remarks*

From a logical point of view all concepts introduced in this chapter are *necessary* concepts, i.e., concepts necessary in the service of order, as all concepts of analytic science ultimately are. Velocity, force, potential energy, etc., in mechanics, formative stimulus, morphogenetic potency, adaptation, etc., in biology, association, "determining" tendency, subconsciousness, etc., in psychology,—all stand on the same plat-

form. And if some of these concepts seem to be more complex than others, the reason is to be found in objects, but not in anything that is subjective.

In the sphere of empirical reality, then, or of "appearance," a particular subconsciousness *exists* just as well as does a particular potential energy, and, if we allow ourselves to take the step into metaphysics (page 158), both of them equally have their *absolute* correlate.

All concepts of order, of course, must be clearly distinguished from one another and must be carefully applied in the particular case. We hope that we have done this; but we are not of the opinion that it has always been done by other authors. In particular the term "subconscious" is often used rather carelessly.

Subconsciousness is *not* the same as the "unconscious soul" with its primordial dynamic organization. It is a fragment of this organization with reference to particular material contents. Freud's complexes, therefore, may be called subconscious, but that which according to our earlier discussions (page 169) determines the character and talent of a person is not "sub-

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conscious," but is *the* unconscious soul in its totality. I fully realize that it may be difficult in particular cases to decide whether it is some subconscious Ego or some fragment of "the" soul that is at work; but theoretically the difference between the two remains.

V

PARAPSYCHOLOGY

WE now come to the last critical point in modern psychology, namely *psychical research* or *parapsychology*. It will turn out that this is the right place to deal with these phenomena, since hypnosis, automatism, sub-consciousness and the like are, more or less, among their prerequisites.

The first problem is, of course, the problem of "factuality"—in other words, the question: *Are* there really "facts" in this field? Many people, some years ago, seem to have decided this question, and there have even been some who have maintained that so-called "psychical" phenomena "never can be and never will be." Such people, who were with God when he created the world, and who know what He was able to do and what not, never die out. It is interesting not to forget in this connection that what now happens to parapsychology, happened also to harmless hypnotism about fifty years ago. It was "all a swindle," and "could and would never

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be." The name of a rather famous psychologist is connected with such a "criticism" of hypnosis!

We ourselves, on the foundation of a rather extensive knowledge of literature and of some personal experience as well, are convinced that there *are* parapsychological or "psychical" facts of various kinds. We shall begin with a short classification.

1. CLASSIFICATION

By *telepathy* (Myers) we understand the immediate affection of one mind by another mind, i.e., a kind of affection which does not occur by means of the sense organs in any way. The affecting mind is called the *agent*, the affected one the *percipient*. Telepathy is *spontaneous* if it occurs without the agent's conscious knowing and willing; it is *intentional* if the opposite is the case. The passivity and mere receptivity of the percipient is the chief characteristic of telepathy proper, if compared with the next group of parapsychological phenomena, in which the percipient is active.

Mind reading is the acquiring of another subject's knowledge in an immediate way, i.e.,

without any normal sort of communication being given by this subject in the form of speech, facial expression, or any movement whatsoever.

Mind reading and intentional telepathy may be combined, and, in fact, usually are combined in experimental work, the agent consciously trying to give and the percipient to "read," i.e., receive.

By *clairvoyance* we understand the abnormal acquisition of knowledge about facts other than another subject's knowledge, i.e., about material states or conditions. Clairvoyance may relate to the past, the present and probably also the future. In the last case it is called *prophecy*. It may, it seems, also relate to the minute "microscopical" structure of objects, botanical ones, for instance, which are normally seen as total objects only, but which may not be "seen" normally with regard to this structure.

Telekinesis is the movement on the part of living persons of material objects without the use of his body organs. *Levitation* is a kind of telekinesis.

Finally, by *materialization* we understand the forming of material structures, mostly of an

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“organic” kind, on the part of a living person without using his body in the normal way, i.e., in the way an artist or engineer does, for example.

This is a short classification of the phenomena in question. It might be given in greater detail, as will appear later, but as a rough sort of classification it is sufficient. It is a classification that does not, so far, imply any sort of “theory” except that it excludes the “normal.”

2. THEORY

A. *Generalities*

The first problem, then, is the following: *Who* performs the phenomena in question? Is it the Ego-part of the soul, or the “unconscious” soul in its totality, or a certain subconscious part of the soul?

In spontaneous telepathy, mostly but not always occurring in a period of danger to the life of the agent, as at the moment of his death, it seems that the mind as a whole, and not its proper Ego-part, is at work. In any case a *conscious* “willing” to affect the percipient seems not to be present in the agent, though a strong thought of the affected person may oc-

cur. All these cases are out of control as regards their dynamics, and we are able only to register the fact.

Experimental telepathy, usually combined with intentional mind reading, proves that conscious willing *may* be effective: I "wish" to influence you at a given time, you "wish" to be affected at the same time; and it happens. Clairvoyance, too, may occur during the normal conscious state of the personality who happens to be its subject.

But intentional telepathy as well as mind reading and clairvoyance is, in most cases, and certainly in the most impressive ones, bound to the so-called *trance*-state of a so-called *medium*. The same is true for the physical phenomena of parapsychology, telekinesis and materialization, though these phenomena may occasionally also occur during the conscious waking state of a person.

A *medium* is a person endowed with the faculty of performing *psychical* phenomena. *Trance* is in most cases a state of hypnosis with a particular power of automatism in the form of writing or speaking; it may also be a state of strong

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activity of a subconscious Ego during the waking of the primary Ego. The psychical phenomena manifest themselves indirectly, namely, in the meaning of the automatic script or in the words spoken. This meaning tells us about things which the medium cannot know normally, and which, at the same time, reveal to us intentional telepathy, mind reading, clairvoyance or prophecy. The physical phenomena performed by a medium, such as a materialization, appear, of course, quite immediately.

A phenomenon which is above suspicion, but which implies perhaps the greatest enigma of all, is so-called *psychometry*, i.e., the fact that a material object, say a watch that has belonged to a person, living or dead, reveals to the medium particulars about this person.

To sum up, we may say that in any case the unconscious or subconscious sides of the mind are stronger in performing parapsychological phenomena than the Ego-side of the mind.

The mind of a medium, then, has abnormal faculties of acquiring knowledge and of performing actions.

B. Physical Phenomena

As to the "actions," telekinesis, levitation and materialization, they are *actions*, no doubt. They should, as far as materializations are concerned, by no means be taken as creations out of "nothing." Matter is everywhere, and it is only necessary to assume that matter is *ordered*, just as it is in painting a picture or in building a house. But the hands are not used for this ordering.

What *is* used, we do not know. But in normal morphogenesis likewise we do not really know *how* entelechy acts. The paraphysical phenomena are in fact nothing but an enlarged vitalism, a supervitalism, as it were. Matter which has not been under the influence of the vital agent, comes under this influence just as in assimilation.

This is true, at least, for all those paraphysical phenomena which occur in material continuity with the body. And in most materializations, levitations, etc., this is the case.

In most, yet perhaps not in all. But if there is no material continuity with the medium's body rather grave difficulties, of course, arise.

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It seems that there are occasionally "appearances" of human forms at a great distance from the medium, and it is also questionable whether *all* levitations or telekineses are performed by abnormal "organs" (as in Crawford's case, for instance) growing out from the medium.

Mere subjective "appearances," of course, do not count. They are hallucinations, though perhaps of a veridical telepathic character. But if the same "appearance" is seen by many persons, even by very neutral ones, the case is different. Very careful and critical investigation must be made here.

C. *Psychical Phenomena*

In telepathy and mind reading we find a direct dynamic relation between mind and mind *with no material intervention*.

This seems to prove that all mind is one at bottom. This is also a conclusion that is reached along very different ways of reasoning in critical metaphysics. All moral feeling, for instance, is only understandable on this assumption.

While speaking of dissociation and co- or sub-consciousness we have learned that there are

many Egos belonging to one soul (and one body), one of which knows about the conscious contents of the others in the form, "*as if they were alien subjects.*"

On the analogy of this fact we may try to understand the matter under discussion. Let us say that the individual minds are parts of one supermind, split up into individual minds, and that under certain unknown conditions one individual mind, *on the foundation of the one supermind*, knows about the contents of other individual minds, just as, in dissociation, one Ego knows about the other Ego's contents. One difference, of course, remains: In dissociation there is only one body, in parapsychological phenomena there are many bodies.

We have stated above that in parapsychology the unconscious mind as a whole, or a subconscious part of it, is more important than the Ego-part of the mind. This view is greatly strengthened by a fact not yet mentioned. In mind reading the percipient—who is the active side here—not only "reads" what the other mind consciously possesses, but also what he has long since "forgotten."

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Telepathy, therefore, may be said to rest upon a primordial relation between mind *as a whole* and *mind as a whole* on the foundation of a super-mind and not merely upon a relation between Ego and Ego.

The interpretation of telepathy and mind reading, then, requires no particular hypothesis *ad hoc*, but only the hypothetic extension of the dynamical psychological or metaphysical relations already established. For, to state it once more, there is, firstly, the mutual knowing among dissociated personalities, and, secondly, general metaphysics needs the concept of one supermind for various reasons which have nothing to do with parapsychology.

D. *Psychophysical Phenomena*

Clairvoyance is much more difficult to understand in principle.

Knowing in the form of subject-object is (page 143) a primordial relation in the sphere of the Absolute. As far as the human mind is concerned, it is true only with regard to generalities. It is only the general categorical schema of

objectivity that is "innate" to the human mind.¹ In clairvoyance, then, it seems that the relation *knowing* refers to more than mere generalities, at least in a latent innate way; that, virtually at least, the mind is a *miroir de l'univers* in the sense of Leibniz, though only under exceptional conditions and in very exceptional persons does the performance of that "mirror" become conscious in the Ego-form.

Can we accept this theory?

There is one great objection to it, and that is, that under the "mirror" hypothesis reality would seem to be absurd. For there is the phenomena of *error*. Error is not fragmentary knowledge, but apparent knowledge where there is none. Error, therefore, would be very strange, if at the very bottom the mind were omniscient. Or may it be that the pure mind is omniscient, but that its Ego-side is disturbed by the material body? Why, then, is the former connected with the latter? You see, we are at once faced with the great metaphysical and, indeed, great theological problems.

¹ See p. 12.

Let us try another hypothesis, namely, that there is a real *sensation* in clairvoyance, though, of course, a sensation not normally known. Then there might be some sort of "rays" at work, an idea so much favored these days. The hypothesis of unknown rays, affecting unknown organs, is not absolutely absurd here, and the difficulty is only that of explaining why so few persons may be affected by such rays, and these only quite exceptionally. Might it be that the mediums are beings on the way to a higher phylogenetic plane, to the "superman"? But enough of a discussion which borders on the realm of mere phantastics.

Let me say a few words here about the reasons which must prevent us from accepting the theory of "rays" for telepathy and mind reading. I need only summarize the arguments brought forth in a very able manner by Tischner.

If there is a telepathic action, say, in the form of an optic hallucination perceived by the percipient *P* and sent out by the agent *A*, the percipient "sees" his friend in danger, but the agent, though he may consciously think of his friend, certainly does not see *his own* body. Now the

ray theory would have to assume that there is a certain state in the brain of the agent, and that rays going out from his brain affect the brain of the percipient in a corresponding way, as is the case with two tuning forks of the same pitch. But this is impossible on account of the difference in what is consciously or even un- or sub-consciously possessed by the agent and by the percipient. In mind reading, on the other hand, the percipient may *have consciously* what the agent has "forgotten"; and thus here also there cannot be a correspondence of "tuning" in the two brains.

E. *Prophecy*

Prophecy is the greatest enigma of parapsychology. I myself have long hesitated to accept it as a fact, but I have become convinced of its existence by recent literature, on the one hand, and by two very extraordinary cases told me by careful and critical scientists, on the other.

We might go back to the theory of the *miroir de l'univers* here again. The future, then, would be *present* in a certain way, not in the form of

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a possible mathematical calculation, but *immediately*. *Time* would be a restriction in the field of appearance, nothing else.

It is useless, however, to say more about a problem which we are sure we *cannot* understand in our present form of mentality. We therefore leave the problem where it stands, and, at the same time, leave parapsychology, with the exception of the spiritualistic hypothesis. About this hypothesis we shall have something to say later on.

Most text-books or essays on psychology do not deal with parapsychology, nor, for that matter, even with "abnormal" normal psychology, such as hypnotism, if a paradoxical expression may be allowed. But it is my opinion that in every science the problematic side is more important for its advancement than the side which is well established and more or less definite. It is for this reason that I have thought it necessary to insert in this book the above "unusual" sections.

VI

THE PROBLEM OF FREEDOM

THE word *free* ought to be applied exclusively to an event which is absolutely undetermined, that is to say, to an event which is neither determined by the medium, nor by the past history of the thing in which it occurs, nor by the *essence* of that thing. Bergson uses the word "*liberté*" in this sense. But Spinoza and Kant, when they speak of "freedom," merely wish to assert that an event, say a human action, is not determined by anything outside, or by its past history, but by its own essence exclusively, i.e., by the "intelligible character" (Kant), or by the *sola sua natura* (Spinoza). This sort of so-called "freedom" ought to be called "correspondence to essence," the word freedom being used exclusively to denote radical indeterminism.

The problem of radical indeterminism may be discussed in a general or in a particular way, i.e., either cosmologically or psychologically.

The cosmological problem deals with the phylogenetic process and its continuation, or his-

tory, regarding this process as *one* event in the realm of superpersonality, and asks whether the single phases of that process are determined by the essence of a given superpersonal factor or not. In the latter case every phase of the process would be "made" in freedom. Bergson holds this view and speaks of *God in the making* (*Dieu qui se fait*). I myself have discussed the problem elsewhere with the result that it may be *settled* insofar as we may really *prove* that it is *insoluble*.¹

The present volume is concerned, of course, only with psychological freedom, in other words, with the problem of a so-called freedom of will (*liberum arbitrium indifferentiae*).

Ordinary psychology as a particular science, i.e., as part of a *theory of order*, treats the matter very simply, as, indeed, it is allowed to do as long as it remains what it is, namely, a theory of mere order. It simply negates freedom most categorically.

Ordinary psychology argues somewhat as follows:

Firstly: No element, "freedom," is discovered

¹ *Wirklichkeitslehre*, 2nd edit., 1922, pp. 103 ff.

in the analysis of the phenomenon of *will*, as a conscious possession (page 35), this phenomenon being found to contain only static elements, but no dynamic element.

Secondly: There is moral feeling, in particular conscience or the feeling of responsibility. But this *may* be only a mere index of the rôle which a suprapersonal entity has attributed to the single psychophysical process belonging to its realm. And since moral feeling *may* be conceived in this way, it must be so conceived by ordinary psychology.

Thirdly: Dynamic psychology simply postulates the determination of every mental event, either by previous events in the mind, or by outside stimulation, or by the essence of the soul, and it often actually discovers the determining factors in the form of association affinities, "determining tendencies," etc. In the life of the day we all take the determination of the actions of our fellow men for granted. Post-hypnotic suggestion is a fine instance of a person believing that he is acting according "to his own liking," but really not so acting.

And yet there is one point which is apt to

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make us doubtful as to determinism, one which may suggest that at least certain actions may be free, or, at least that man may be free at certain moments of his life. That point is this: The whole phenomenon of *being conscious* would be a *superfluous* element in reality, a mere luxury, if there were no freedom.

In order well to understand what is meant by this statement, let us begin by distinguishing two kinds of *freedom*,—real freedom, of course. Schelling in his later years made such a distinction with regard to the freedom of God in His relation to the world. We shall make use of it with reference to man and his actions.

The first kind of real freedom may be called the freedom of *such*. By this is meant the possibility that there may be contents of willing which originate freely with regard to their quality, this quality being necessitated by absolutely nothing but being “made” as something entirely new. As we have no reason whatever to accept this sort of freedom, we shall not discuss it further.

The second kind of real freedom is the freedom of *that* or of *whether or not*. Under this

heading the contents of will are considered as originating in a necessitated way; they are the effects of the medium, of the past experience of the subject in question, and of the constitution of his soul. But to say *yes* or *no* to them, or perhaps *only* to say *yes* or not to say *yes*—which is not the same!—would mean freedom. And the saying *yes* would be an act of that side of the mind which knows itself in the form of Ego.

At first glance this hypothesis seems to contradict our primordial statement that the Ego is inactive in its very essence, that the Ego only *has consciously*, but does not “do” consciously. But giving the “yes”-accent need not necessarily imply real doing in time.

The Ego would say “yes” or not say “yes” to a content of his will on the basis of the totality of his experience, of course. The Ego would “deliberate.” But, if there is real freedom, the Ego would *not* be *forced* by the deliberation. He would perhaps decide according to certain maxims. But he would *not* be *forced* by these maxims. Feelings on the one hand, intellectuality on the other, would be consulted. But, likewise, there would be no enforcement here.

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Only on this assumption would *conscious having*, or, to use a short word we do not much care for, "consciousness," be anything more than a mere luxurious *epiphenomenon*. Without this assumption consciousness would remain an *epiphenomenon* exactly in the same way as it would on the basis of psychomechanical parallelism, which we have rejected. For all events would be determined by the unconscious side of mental life, and consciousness would only tell us what happens; that would be all.

Now, of course, we may say that the world is what it is, and that consciousness belongs to its essence just as it belongs to the properties of a lobster's body to become red from cooking. But consciousness is such an impressive character of psychophysical life that it is difficult to accept a theory that takes all dynamic importance, all effectiveness, from it.

If, on the other hand, we accept the doctrine of freedom, everything connected with consciousness at once becomes important. Sensation gives us knowledge of the medium or, in the form of pain, for instance, of the state of our body; feelings announce to us the general state of the

soul, whether it is on a good road or handicapped by obstacles, so to speak; thoughts are indexes of the intermediate or final results of its working; the contents of wishing or willing tell us what the soul proposes to perform, in correspondence with the totality of all activities present at a given moment. And all this, in order that *I* may decide, not about *what* there is to do, for this comes before me in the form of contents of my will, but as to *whether or not* "doing" is to happen at all in a certain case.

It is *only* under the *aspect of freedom* that consciousness becomes important, not dynamically, yet *for* the dynamics of the psychophysical life. No other *aspect* is imaginable under which consciousness might become really important; without this aspect we are forced to regard the world from the esthetic point of view exclusively, that is, as a sort of mere theatrical performance.

The contents of conscious feeling, wishing and willing, seem to be still more important than the contents of pure thinking in this respect. To have a thought content is a matter of contemplation, a mere result of a static kind. But to have a feeling, a wish or a will content, is to have

something which, though static in itself, as all *having* is, nevertheless refers to the future, that is, to some sort of *doing*, though not on the Ego's part. "The mind is in a good general state," is told me by hope or wishing or joy; "it is in a bad state, distrust its proposals," is announced to me by sorrow. Finally, will contents are signs of an immediate preparedness of the mind, which is only waiting for the signal. Now the *Ego* sets in, overlooking "the whole" of its conscious contents (page 172) and gives *or does not* give the signal in freedom.

I do not say that I have brought forth a real argument in favor of the freedom of will. I have only discussed an *argumentum ad hominem*.

It is for you to decide whether you will accept it or not—and do not forget, at the same time, that the fact of prophecy, rare as it may be, is very much in favor of radical determinism.

It almost seems as if the only "free" act were the freedom to decide about freedom itself! Practically, we all do decide in some way here. Is this decision then really free? Again—we do not know.

Let me still mention a few particulars:

Only if consciousness is important for mental dynamics are several strange peculiarities of sensation to be explained, especially the impressive localization, "outside in space," of all optic sensation, and the localization "*here* on my body," of all sensations in the sphere of touch. Why these very elaborate peculiarities of psychophysics if they are dynamically related to nothing?

You may say that all suggestion and auto-suggestion is in favor of determinism. Certainly it is, at first glance. But if we look more closely, we appreciate that the *first* link in the process of suggestion or autosuggestion is the *will* to it (page 199). Is, then, *my willing* autosuggestion, i.e., *my willing to be determined* in the future by autosuggestion, *free*? Thus we face our problem again, and again no possibility is given of deciding it in a truly definite way. Again you may decide "as you like," and again also the paradoxical question appears, whether your "liking," which might lead to your decision about the problem of freedom, is free or not. Finally, consider what follows: By autosuggestion, as Coué and Baudouin tell us, a high degree of intellec-

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tual and moral perfection may be reached. You *will* this perfection, whenever you will autosuggestion. But man is a "moral" being, moral feeling constituting his "second nature," as the Stoics expressed it. Therefore, if man is a moral being "by nature," the "will to perfection" belongs to his essence: he *must* necessarily will autosuggestion as soon as he knows what he may acquire by its use. And thus man may be a moral automaton! How to avoid this paradox I do not know!

VII

IMMORTALITY

THE basic fact, *I have something consciously* is limited in time; it has a beginning and an end. So it is, at least for ordinary experience, with regard to other "subject-points" and therefore, also, most probably for me. What I really know, however, is as follows:

That form of *conscious having* which is my own does not manifest itself any more in my fellow-creatures after a certain time, the end of its manifestation coinciding with the so-called death of their bodies. This is all I really *know*; but, because I know so very little, *immortality* is a "problem."

What I do *not* know is, whether "end of manifestation" means "end of existence." This I may know only when my body is dead. But I wish to know at least something about it "now." It is for this reason that I discuss immortality.

General metaphysics has something to tell us here, but its statements are of such a general

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kind that they cannot meet our proper psychological requirements.

Metaphysics tells us that *knowing* is an essential characteristic of reality (page 160), that an essential character cannot be destroyed and that for this reason knowing is eternal. But this does not interest us very much. What we want to know is in what *form* knowing is indestructible, whether in the form of the Ego-person or not, whether combined with a conservation of the contents of personal memory or not, whether in the form of a temporal existence or in the form of a non-temporal one which would not be at all imaginable in a positive way.

Our only help, so far, seems to be vitalistic biology, but even this cannot tell us very much. According to the theory of the autonomy of life, the essential agents responsible for the formation of an organism are not agents working in space and having their starting points in particles of matter, but agents working *into* space, if a paradoxical expression may be permitted. May such agents not also come from "outside time," we may ask, and go into "outside time,"

when the phenomenon of death occurs? Of course, they *may*. But we have no means of deciding whether they do this or not, so that the temporal side of vitalism is much more problematic than the spatial one.

Concerning the problem of *personal* immortality we have even still less to say than about the temporal side of the problem, at least if we want to remain on scientific grounds. Yet there are many possibilities:

The personal Ego may remain a personal Ego after death, in time or not in "time"; or it may be absorbed by a suprapersonal Ego with the extinction of all personal "Ego-ness," including personal memory; or it may be absorbed in this way, and yet conserve its personality in a certain unknowable way. Also, there may be re-incarnation, or not. There may be transformation into quite unknowable forms of existence, or not. There may be a second death after the first empirical one, or not. And there may be many, many other things, or not. What there *is* we are unable to say—until we "experience" it ourselves, i.e., until we die.

A word must, of course, be said here about the spiritistic¹ theory. Let me say, then, in the first place, that I regard this theory as a thoroughly legitimate one. It is by no means nonsense to assert that the personal soul (or entelechy, if you prefer) survives death and is able to "appear" again under certain conditions, manifesting itself either in a visible form or at least by certain performances. But I do not believe that this hypothesis has yet been proved. We must be very careful, too, about what we admit as "proof" here. As long as we are able to reduce so-called spiritistic phenomena to telepathy, mind reading, clairvoyance, telekinesis or materialization, having their origin in the mind of living persons, we *must* so reduce them, unless fraud can be shown to exist in this connection. It seems to me, however, that there are no spiritistic phenomena known at present which may not be so reduced.

Some authors have said that it is impossible in principle to prove spiritism, since the possi-

¹ The proper English word is "spiritualistic," as I well know. But this word ought to be avoided, as it is too readily accepted in the sense of "idealistic."

bility of *some* sort of parapsychological explanation can *never* be excluded. Take, for instance, the so-called *experimentum crucis* carried out several times by members of the British Society for Psychical Research. The experiment has given negative results so far; but even if there should be a positive result, what would follow from it?

There is the case of a man feeling his death very near. He writes down a poem while quite alone. The poem is put away and officially sealed. The man dies. Some time after his death he seems to speak through the mouth of a medium. He is asked about the poem and the medium writes it down.

Is this a "proof" of the man's personal existence after death? By no means. For the written poem exists as an empirical object and there is—clairvoyance!

And even if survival should be regarded as proved, we should know nothing about its form, which is what interests us most. Might it not be that the mind of the dead has been absorbed into a suprapersonal Ego, with absolute extinc-

his lifetime. The persons present at the experiments know many of these facts; others they have once known but have long since forgotten; others they have not even known in the past, but there are other living beings, at a great distance perhaps, who know or have known them.

You may find the explanation here on the basis of mind reading, of course, if only you concede that the medium may "read" what has long been forgotten and that she may also "read" in the mind of absent persons quite as she likes.

But the strange thing is that the medium writes all her supranormal acquisitions, coming from very different sources, in such a way that they seem to come from one and the same personality, the dead, who was not even known to the medium in many cases.

The specific *selection* of the singularities from various minds is the one thing, the *unification* into the schema of one personality, the dead, is the other thing that demands explanation. And it has often happened that "the dead" expresses himself with all the characteristics he had in life, that he uses unusual expressions which were

peculiar to him, that he speaks Greek or Latin,⁵ not known to the medium, etc.

I confess that this is to me the strangest phenomenon of all parapsychology and that, in any case, it prevents me from radically rejecting the spiritistic hypothesis in some form. Not rejecting in a radical way and accepting are, however, two different things.

⁵ This feature is called *the Classics* by British authors.

VIII

CONCLUSIONS

1. THE CRISIS

WE have called this book the "Crisis" in psychology. What, then, are the critical points in this science at present? To explain this means at the same time to give a short summary of most of the essential topics we have discussed.

Speaking literally, *krino* means I decide, and *krisis* means decision. What, then, is decided or is at least on the point of being decided in modern psychology? I believe it is the road which psychology is to follow in the future. And this road depends on certain specific discoveries. We therefore may say that these discoveries mark the critical points in modern psychology and, for this reason, its crisis.

The discoveries I am speaking of are not of the kind that new results in the sciences of nature used to be. They have, in most cases at least, nothing to do with new "facts," unknown in the

past, though some such new facts are, of course, in question.

The first critical point refers to the theory of elements. There is *meaning* among the elements, i.e., among the elements of the objects which I consciously possess or have; and this meaning appears in various forms: accents of order, accents of truth, accents of the sphere of existence and probably still other kinds of accents, not yet clearly worked out. This topic is still not psychology proper, at least if we call psychology the doctrine of something that is dynamic. It is phenomenological, to use an old word in the sense given to it by Husserl. The *essence* (*essentia*) of certain objects is in question. We do not face a discovery here that is comparable to a discovery in chemistry or in biology. Many people in the past have, of course, seen that there must be elements of meaning. But they have not seen it *clare et distincte*, to use the words of Descartes, but merely in the form of an instinct or intuition. It was for this reason that there were so many "private" psychologies in the past, as we explained in the beginning. Also the fact that association psychology has never ceased to be

an object of dispute proves unmistakably that many people instinctively felt that everything was not "in order" with regard to it, without being able to tell what was still required.

The second critical point relates directly to association psychology itself, and not merely to the materials with which it works. People were aware that enrichment in meaning and in truth was the chief characteristic of mental life and that this feature could not be explained by association. But *how* was it to be explained? Nobody knew satisfactorily. But the formulation—I do not say the "discovery"—of definite limiting and directing agents solves the problem. Association psychology is *really dead* now.

A third critical point was also seen implicitly long ago, but was made out explicitly in our time. This is the existence of the *unconscious*, which is yet psychical and not physical. Leibniz already saw this under the form of the *petite perception*. E. von Hartmann saw it still more clearly, and used it as the basis of his whole philosophic system. But even this great thinker was not able to give an account of it in full. New formulations were necessary in order to do this:

subconsciousness, hypnosis, dissociation, complexes, and the like. We might perhaps be inclined to say that we meet real new discoveries here and not merely new formulations. And this is true with regard to certain details. But in general the "facts" have been known here also for a long time, but were regarded by "scientific" people as a mere swindle or "superstition." We now know that it is not a case of superstition, but of fact. And, what is most important of all, we now realize that what was first regarded as only an exception, as an "abnormality," is in fact quite "normal." For even association or, rather, associative affinity, i.e., the most primitive of all the dynamic agents of the mind, is an *unconscious* agent, only the results of its working being conscious.

The fourth critical point in modern psychology relates to psychophysics. The central problem of psychophysics has become "critical," namely, the *mind-body* problem. Psychomechanical parallelism or epiphenomenalism at one time appeared to be victorious all along the line. But it only "appeared" to be this. There were always some rather important authors who did not ac-

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cept it, though they were not able to give sound and convincing reasons for their rejection. Now we have such reasons: The analysis of action as a non-mechanical phenomenon in nature, and the analysis of the manifoldness of "the Psychological" offer them to us. Psychomechanical parallelism will *not* raise its head again.

Last, but not least, there is *psychical research*. In this field alone we have new *facts*, with regard to materialization, for instance, though here also most of what concerns us is only a new analytic formulation of very old things.

All critical topics mentioned so far have one thing in common: They reestablish the popular view of the psychical and of its relation to mechanics. The older psychology, to a great extent at least, had become absolutely alien to mental life as it is experienced by natural men. It "explained" something that did not exist! But modern psychology tries to explain what really is present. The popular view of mental life is *deepened* by it, but not displaced.

A comparison of modern psychology with modern biology is very instructive and impres-

sive. In biology mechanism is overthrown, just as in psychology mere association is overthrown, with all its consequences. The parallel, is, in fact, almost complete: In psychology elements which are not of the "sensible" kind,¹ in biology elements other than material ones. In both, directing agents; in both, the *unconscious*. Finally, all narrows down to one very important point: In modern biology and in modern psychology the concept of the *whole* plays a *fundamental* part, while in the older biology and psychology everything was based upon the concept of *sum* and *resultant*. In the place of the "sum-concepts," *association* and *mechanics*, we now have the "totality-concepts," *soul* and *entelechy*.

In the modern solution of the mind-body problem everything that is new and important in psychology as well as in biology is centered.

2. PROBLEMS UNSOLVED

By saying that psychology is at a critical point and sees new roads which it now may follow, we by no means wish to express the opinion that everything in the sphere of mental life is now

¹ *Anschaulich* in German.

settled or solved, at least in principle, and that the psychology of the future can be devoted only to the investigation of details. On the contrary, there are many, indeed, a great many problems in psychology which have not yet reached even the "critical" point, which have not yet passed beyond those "private" and instinctive grounds upon which psychology as a whole rested so long.

The most important of these pre-critical problems of psychology is the psychophysical problem. The rejection of the old parallelistic theory remains in the negative sphere almost entirely. Concerning this problem we know what is not true, but we only know in a very general way what is true. In particular it is the part played by the *brain* that is still very far from clear and very much disputed. There is no strict localization in the brain in the sense of the older theory—but what is there in its place? There is also no "specific energy" in the sense in which Johannes Müller maintains this theory. Nerve stimulation is not only a quantitative but also a qualitative process, but in just what sense it is qualitative, is the question. Why do I "hear," when a certain definite part of the brain is stimu-

lated, and why do I "see," when a stimulus affects another part? What does madness mean? What part is played by the brain in hypnosis and dissociation?

We are absolutely ignorant as regards these questions.

The only way, strange to say, along which definite answers might be possible, would be an experiment carried out by the physiologist or psychologist on *his own* brain. Otherwise we can never know whether there are defects in the essence of mental life or only defects with regard to its bodily expression. The self-experimentator might tell us as to this. But, perhaps also, he might not "tell" us, but would acquire the important knowledge exclusively for himself; then the whole investigation would be indifferent for "science," for science is of a social character and needs communication.

Parapsychology or "psychical research" is, of course, also still in the pre-critical stage, though it is of great advantage to this new branch of science that it coincides in its origin with a period of psychology which is critical in its general aspect. In this field almost everything

that is "theoretical" still remains to be done, though, strange to say, not all parapsychological phenomena offer us an enigma of such an overwhelming kind as pure sensation does. Telepathy and mind reading at least are phenomena of a *simpler* kind than normal sensation, because the brain, most probably, does not take part in them, while clairvoyance may at least be conceived without the interference of the brain. If the brain were required here, the conditions, of course, would be the same as in normal sensation, for then clairvoyance would be "sensation."

The physical phenomena of parapsychology, levitation, materialization, etc., are a mere continuation of biological phenomena, as understood on the *vitalistic* foundation. Only if there were materialization without any continuity with a living body would this not be the case.

Thus most "psychical" phenomena may be understood by known principles which only have to be enlarged in a certain way. It is sensation, pure and simple, that remains the great enigma.

I should not say that *knowing* or *consciously having* is itself an enigma. Here the question of "why?" is simply absurd. "Consciously having"

exists, and this is enough. But within the sphere of knowing we are forced to ask, for example, "why" I *hear* in one case and *see* in another. But a real enigma is present only if we are *forced* to ask and cannot understand. The particulars here^e are, therefore, more enigmatic than the generality.

What, then, shall be our programme in psychology and psychophysics? It must be that of working in the most critical and analytical manner, studying details most carefully, avoiding generalities which are too easily acquired, looking out for exceptions, since exceptions are the best means of avoiding dogmatism, and investigating abnormalities, not because they are abnormalities, but because they open the field to an understanding of what is normal.

There are, then, many enigmas of a very impressive kind in psychology. But the greatest, though not the most "impressive," of all psychological enigmas stands before every human being, whether psychologist or not, at every moment of his life. And the psychologist has only formulated, so far, that enigma, but has not solved it. It is the enigma of specific sensation.

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